ORDER NO. KM49208241A3

Service Manual

EASA-PHONE
ELECTRONIC MODULAR
SWITCHING SYSTEM

KX-T30810B-3

Panasonic EASA-PHONE MODEL NO. KX-T30810B

TELEPHONE EQUIPMENT
POWER SOURCE
AC~ 115V/200V/220V/240V 50/60Hz 40W

SERIAL NO.

Matsushita Electric Industrial Co., Ltd. Made in Japan

(Model KX-T30810B)

Panasonic EASA-PHONE 1
MODEL NO. KX-T30810B

TELEPHONE EOUPMENT
POWER SOURCE
AC~115V/200V/220V/240V 50/60Hz 40W
SERIAL NO.

Matsushita Electric Industrial Co., Ltd Made in Japan

(Model KX-T30810B-1)

Panasonic EASA-PHONE @ MODEL NO. KX-T30810B

TELEPHONE EQUIPMENT
POWER SOURCE
AC- 115V/200V/220V/240V 50/60Hz 40W
SERIAL NO.

Matsushita Electric Industrial Co., Ltd Made in Japan

(Model KX-T30810B-2)

Panasonic EASA-PHONE 3

TELEPHONE EQUIPMENT
POWER SOURCE
AC- 115V/200V/220V/240V 50/60Hz 40W
SERIAL NO.

Matsushita Electric Industrial Co., Ltd Made in Japan

(Model KX-T30810B-3)

 There are 4 types of model KX-T30810B, such as KX-T30810B, KX-T30810B-1 KX-T30810B-2, and KX-T61610B-3.

2. The model KX-T30810B-3, has a mark ③ on the name plate in figure left.

3. Please use this manual for model KX-T30810B-3.

Note: Technical Guide...Refer to the KX-T30810B-1 Technical Guide (order No. KM48903368G3).

COMPARISON TABLES/СРАВНИТЕЛЬНЫЕ ТАБЛИЦЫ
PROGRAMMING TABLE/ТАБЛИЦА ПРОГРАММИРОВАНИЯ
WIRING CONNECTION DIAGRAM/СХЕМА СОЕДИНЕНИЙ
SCHEMATIC DIAGRAM/ПРИНЦИПИАЛЬНАЯ СХЕМА
REPLACEMENT PARTS LIST/ СПИСОК ЗАПАСНЫХ ЧАСТЕЙ

Panasonic

■ SPECIFICATIONS COMPARISON TABLE

SPECIFICATIONS	KX-T30810-1	KX-T30810B-3
General Description 4. Power Supplies	Primary AC 120 V, 60 Hz	Primary AC 115/200/220/240 V, 50/60 Hz
Characteristics 5. Primary Power	120 V ac, 60 Hz, 0.4 A maximum	115/200/220/240 V ac, 50/60 Hz 0.4 A maximum

■ CONNECTION COMPARISON TABLE

CONNECTION	KX-T30810-1	KX-T30810B-3
Optional Battery Adaptor	KX-A16	KX-A16B
Power Supply	120 V, 60 Hz	115/200/220/240 V, 50/60 Hz
Model No.	KX-T30810	KX-T30810B

■ BLOCK DIAGRAM COMPARISON TABLE

BLOCK DIAGRAM	KX-T30810-1	KX-T30810B-3
Power Supply	AC 120 V, 60 Hz	AC 115/200/220/240 V, 50/60 Hz

■ PROGRAMMING

Notes: 1. For details of installation, refer to the Installation Manual (Part No. PQQX5289Z).

2. For details of operation, refer to the User Guide (Part No. PQQX5291Z).

(Model KX-T30810-1)



Notes: 1. For details of installation, refer to the Installation Manual (Part No. PQQX5391Z) and Leaflet (Part No. PQQX10231Z).

2. For details of operation, refer to the User Guide [Part No. PQQX5392Z (English), PQQX5393Z (Spanish)].

(Model KX-T30810B-3)

■ PROGRAMMING TABLE

Toll Restriction—Class Assignment	[10]	1 1	[MEMORY] [END CLASS 1/2/3/4 he desired extensio		ber a	ppea	rs				
			Default			To ma	ke pro	gram	change	?	
		Extensions	all extensions	11	12	13	14	15	16	17	18
	İ	Class 1 (all calls)	×								
		Class 2 (toll calls, local calls)									
		Class 3 (selected area-codes, locul calls)									
		Class 4 (local calls)			ļ		T				

(Model KX-T30810-1)



Toll Restriction—Class Assignment	[10]	T i	CT] [MEMORY] [END CLASS 1/2/3 il the desired extensio		ıber a	ppear	. 2				
			Default	Ι	7	o mai	ke pro	gram	chang	ge .	
		Extensions	all extensions	11	12	13	14	15	16	17	18
	i	Class 1	×								
		Class 2		1		I					

(Model KX-T30810B-3)

Programmable Operator Call	[12]		[MEMORY] [ENI ENABLE/DISA desired extension	BLE		pears					
			Default			То та	ke pro	gram .	change	:	
	Ì	Extensions	all extensions	11	12	13	14	15	16	17	18
		Enable	×								
1		Disable									

(Model KX-T30810-1)



Call Back Time	[12]	NEXT] <u>[SELECT]</u> [ME 30 SE	MORY] [END] EC/15 SEC		
			Default	To make program change	
		30 sec	×		
	ł	15 sec			

(Model KX-T30810B-3)

Programmable Toll Prefix	[29]	[NEXT] [SELECT] [MEMOR		
			Default	To make program change
		With 1	×	
		Without I		
Programmable secret Auto Dial	[30]	[NEXT] [SELECT] [MEMOR		
			Default	To make program change
		No secret	×	
		Secret		

(Model KX-T30810-1)

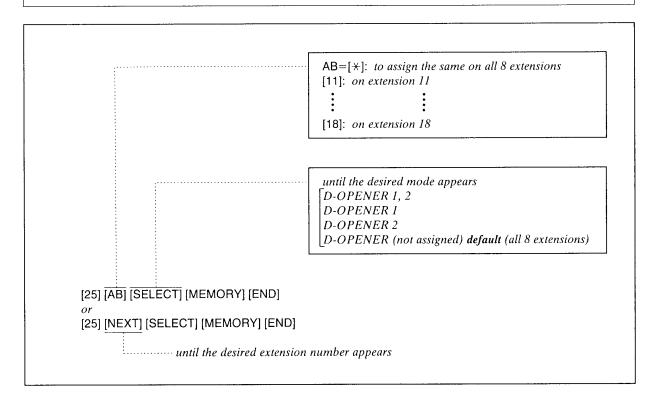


Programmable secret Auto Dial	[29]	[NEXT] [SELECT] [MEMORY]			
			Default	To make program change	
		No secret	×]
		Secret]

(Model KX-T30810B-3)

Addition

Programming for Door Opener



Description

Allows each extension to be programmed for unlocking the door. Up to 2 Door Openers can be connected to your unit.

Programming

- 1. Dial (25).
 "ENTER EXT NO" will be displayed.
- 2. Press the NEXT button.
 "11: D-OPENER..." will be displayed.
- 3. Keep pressing the SELECT button until the desired mode of door openers is displayed.
- 4. Press the MEMORY button. The LCD will stop blinking.
- 5. Repeat step 2 to 4 to program the mode of the other extensions.
- 6. To return to the initial programming mode, press the END button.

Conditions

- •When you start the programming from step 1, you may dial the desired extension number instead of NEXT button at step 2.
- •The PREV button allows you to go to the previous extension for displaying the door opener assignment.

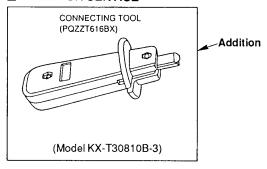
Example:

To allow extension 12 to open the only D-OPENER 1. [25] [12] [SELECT] [SELECT] [MEMORY] [END]

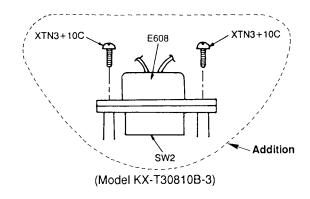
Programming Table

	Default		7	o mai	ke pro	gram	chang	ge	
Extensions	all extensions	11	12	13	14	15	16	17	18
not assigned	×								
Door opener 1									
Door opener 2									

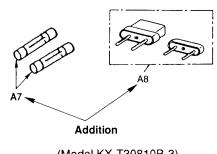
■ TOOL FOR SERVICE



■ EXPLODED VIEW

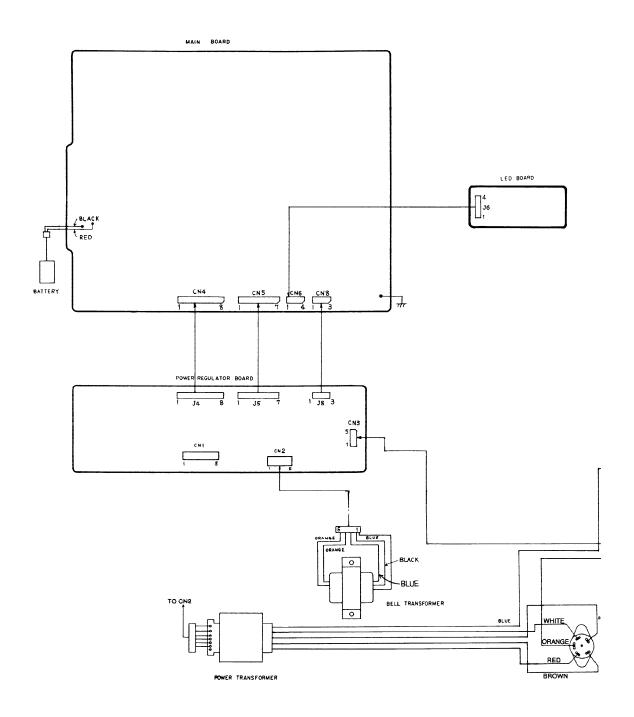


■ ACCESSORIES & PACKING MATERIALS



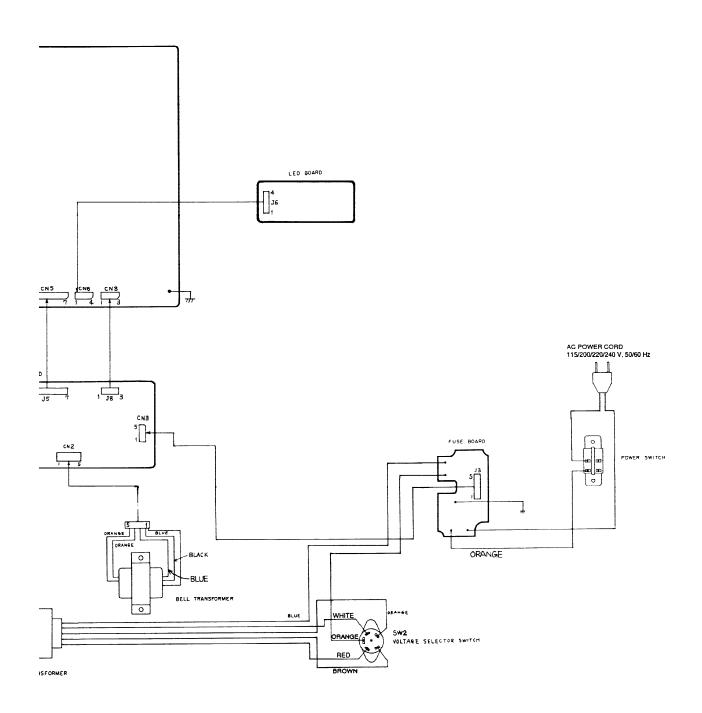
(Model KX-T30810B-3)

WIRING CONNECTION DIAGRAM

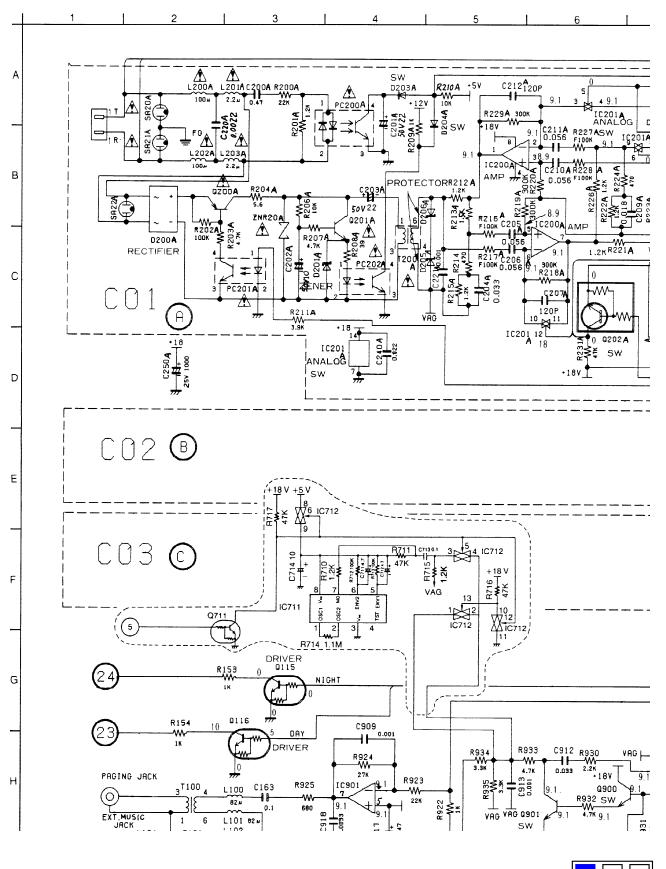




WIRING CONNECTION DIAGRAM

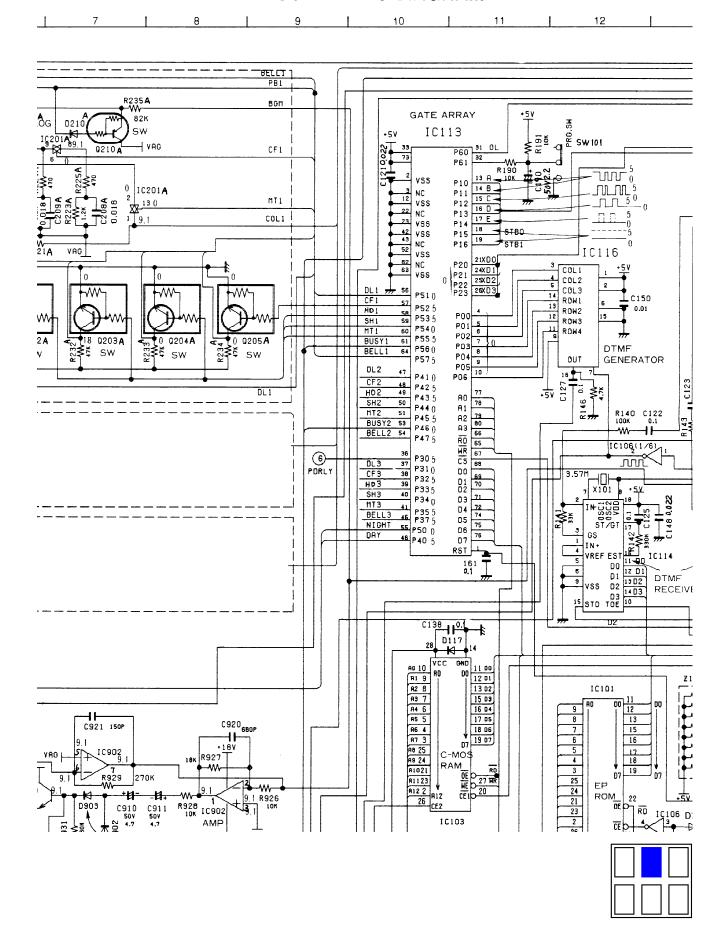


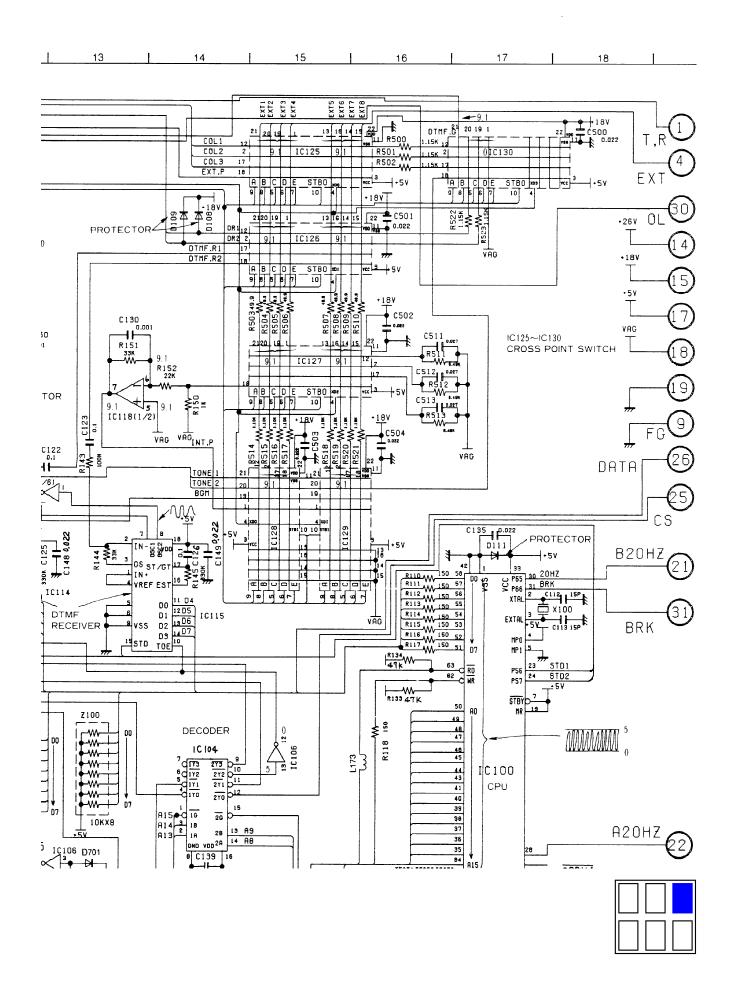


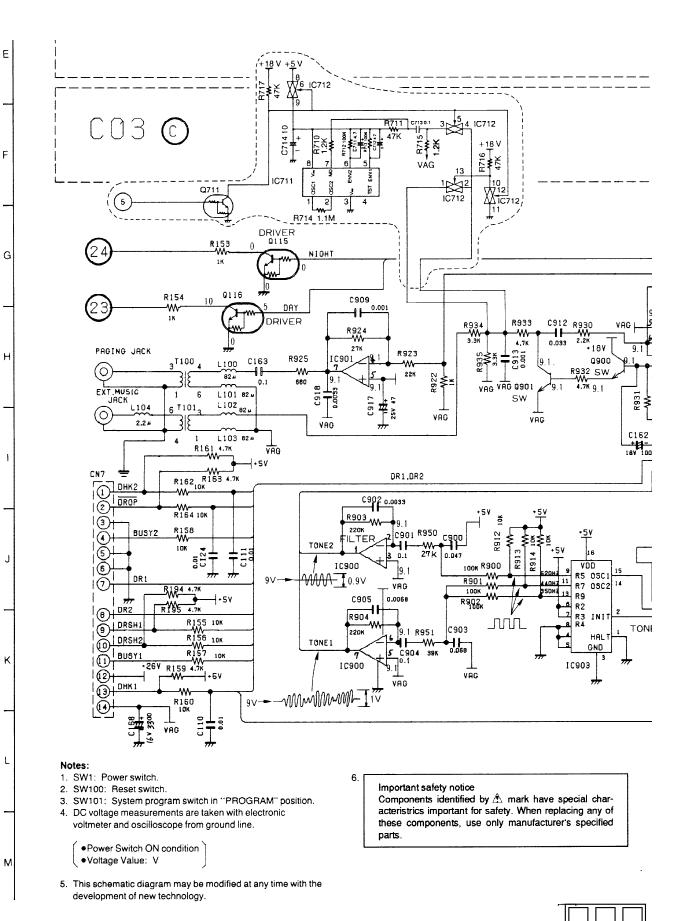


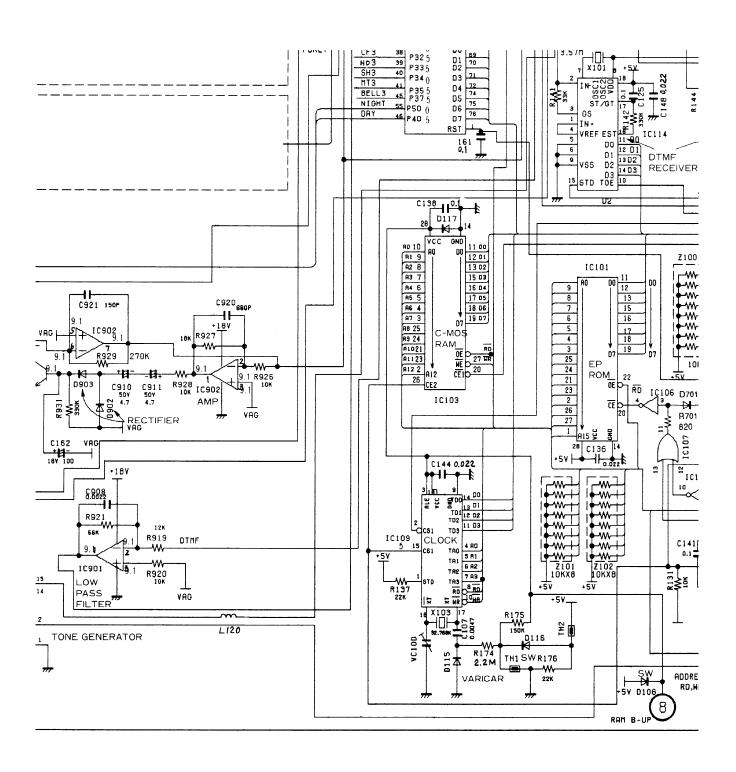


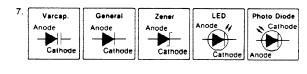
SCHEMATIC DIAGRAM



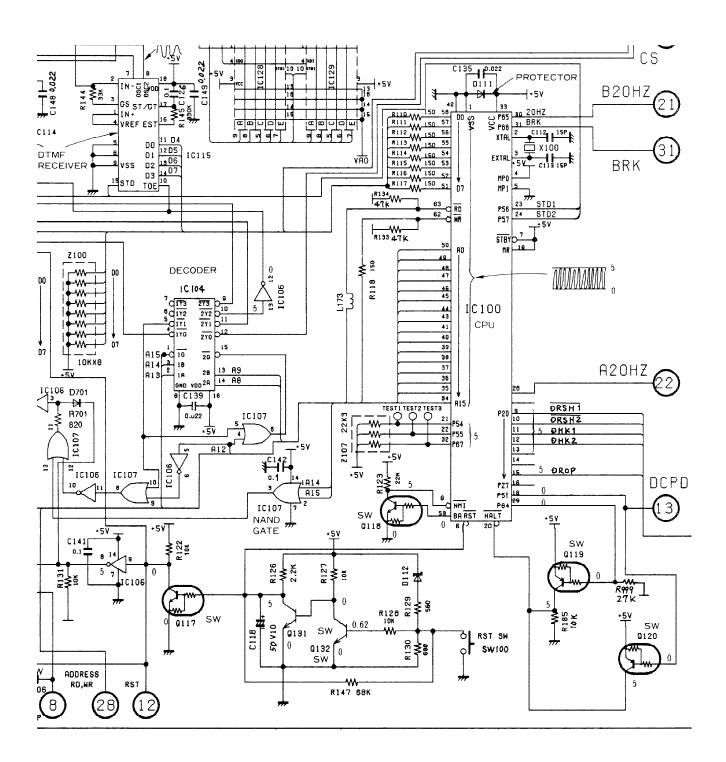




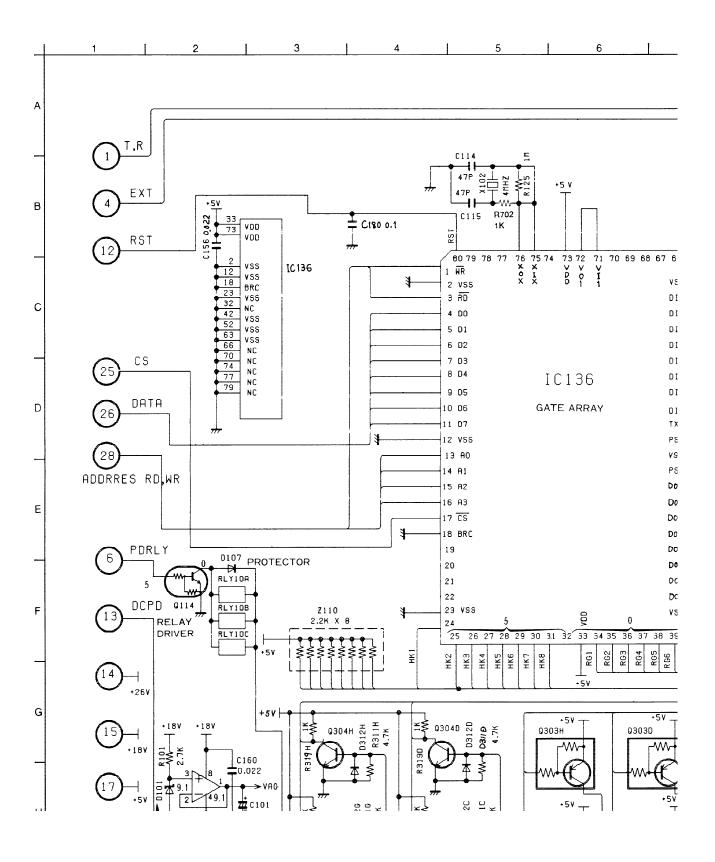








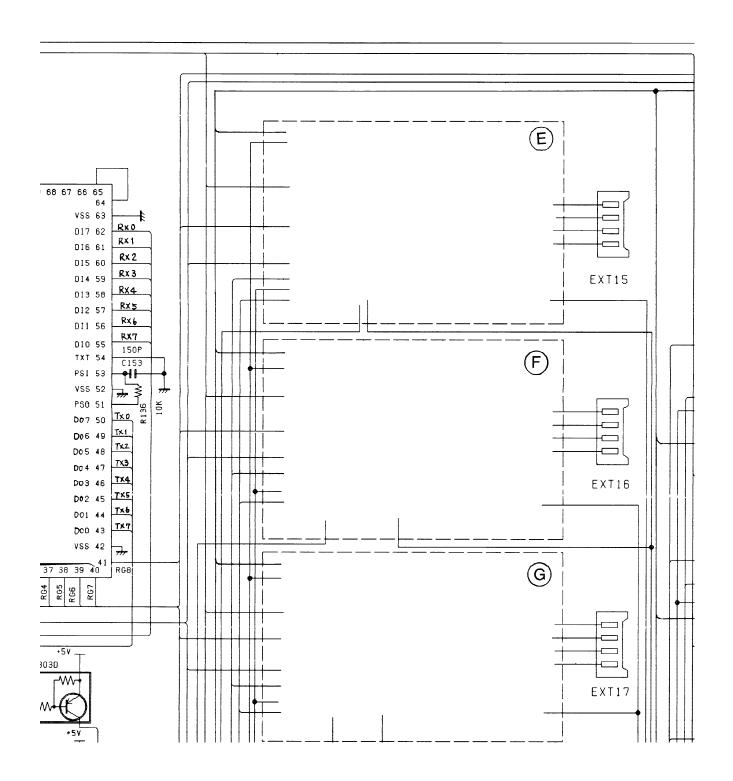






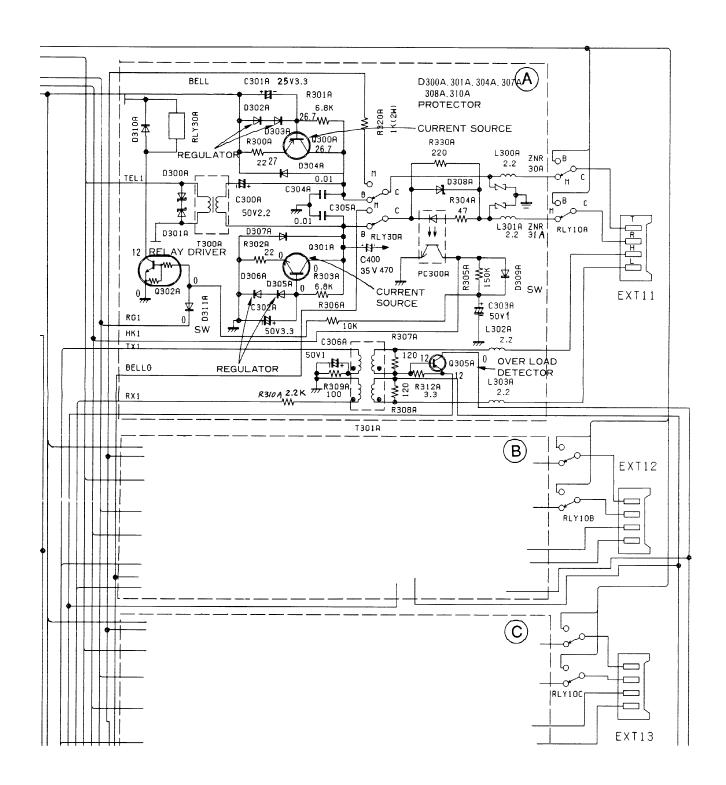
SCHEMATIC DIAGRAM



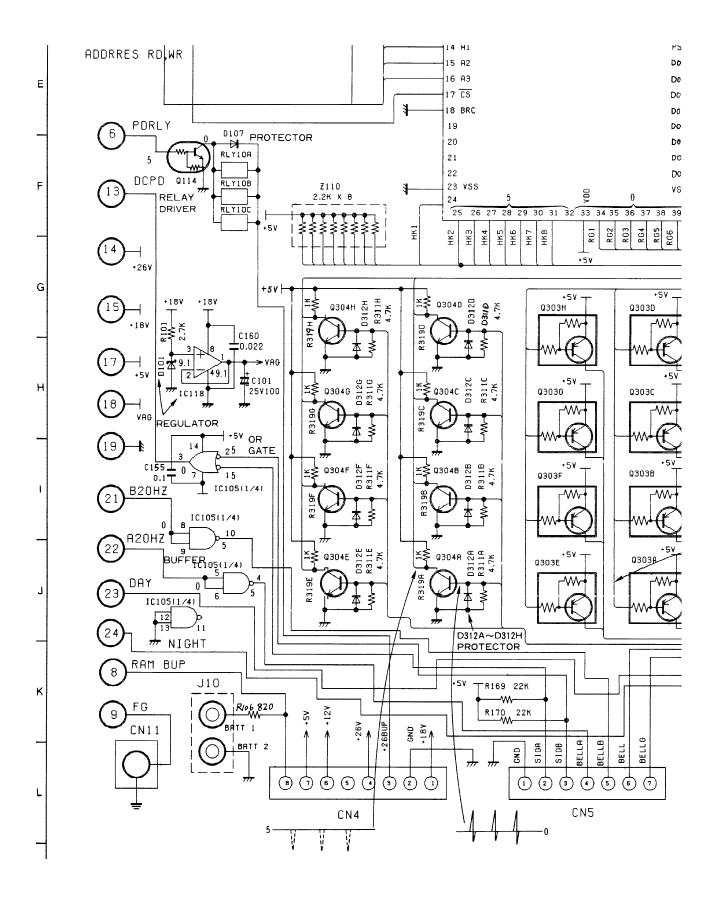




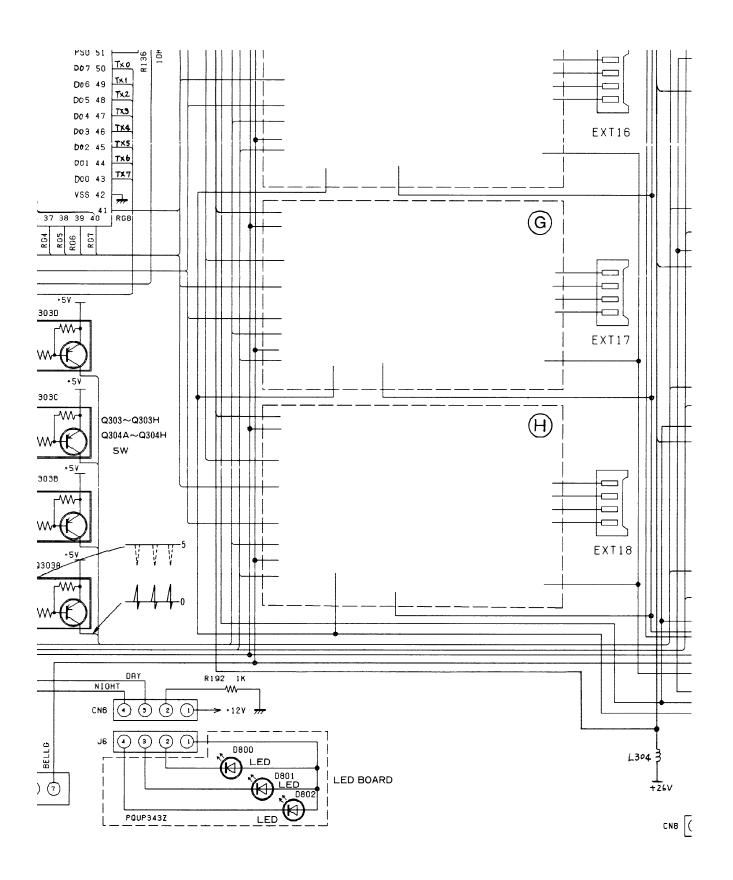
13 | 14 | 15 | 16 | 17 | 18 |



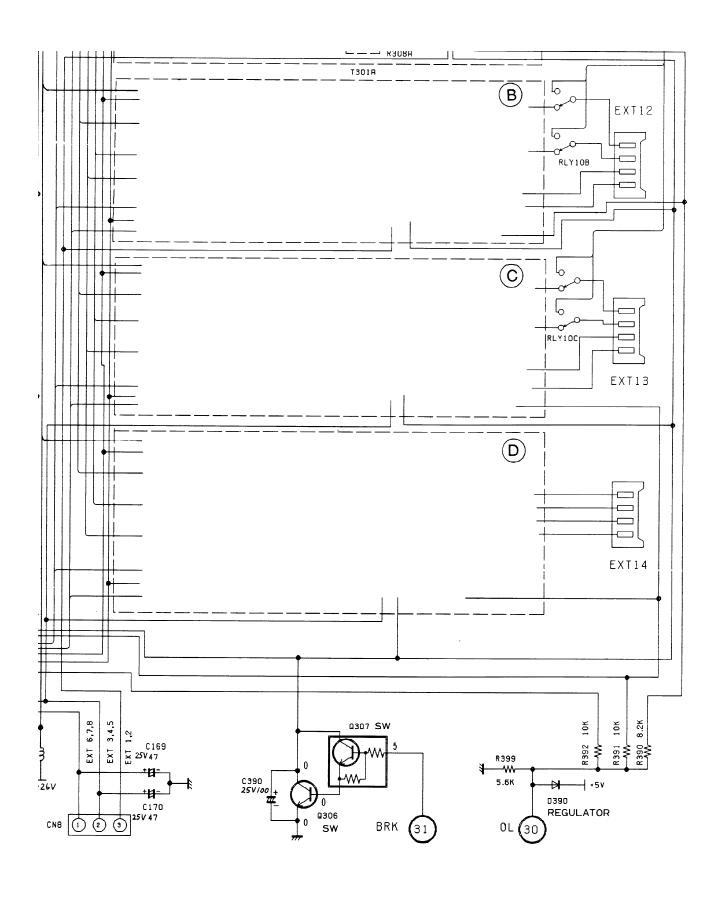




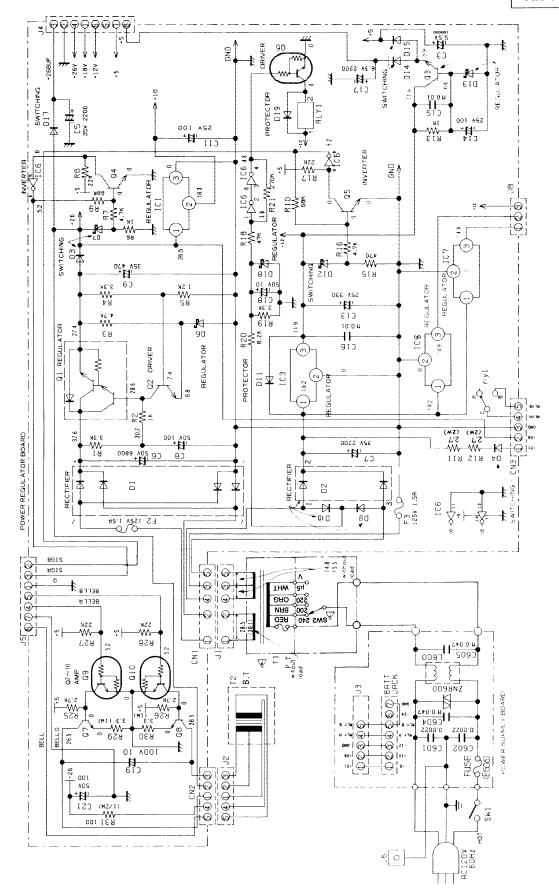












	REPLAC	EMENT	PART	SLIST			00400.0
Notes:	(DTI VIII JULIA	alama alam 5		T:		del KX-T3	
1. The marking	(RTL) indicates intinuation of thi						
	intinuation of thi for a specific pe						
	n the type of as						
	duct retention.						
longer be av		THE THE	E110 01	ana pe	100, 170	assembly	14111 1110
2. Important saf							
	identified by the	. A mark	specia	al chara	cteristics	important	
for safety.	,	Δ,	-,				
	ng any of these	compone	ents, u	se only	manufac	turer's spe	ecified
parts.	3 7			,			
3. The S mark in	ndicates service	standard	parts	and ma	ay differ f	rom produ	ction
parts.							
4. RESISTORS	& CAPACITOR	S					
Unless others	wise specified.						
	re in ohms(Ω)						
1 '	are in MICRO I	ARADS	(μF)	P= 0.00	1μF		
	age of Resistor						
Туре	Jeog M. J.		T505	D.O			
ERC:Solid	ERX:Metal F FRG:Metal C		1	ID:Carb IO:Fuse			
ERD:Carbor	ERO:Metal I			:Wire W			
PQ4R:Chip Wattage	TEHO.Metal I	-11111	ENF	.vviie vi	round		
	W 14,25,S2:1/4	1W 112	50 S	1:1/2W	1:1W	2:2W	5:5W
	ge of Capacitor	111	0,00,0	1.172.4	11::-1	,	10.011
Type	go o. capacito.						
ECFD:Semi	Conductor	ECCD.	ECKD	,PQCB	C, : Cera	mic	
ECQS:Styro		ECOM.	ECQ\	/ ECOE	ECQU.E	COB : Po	lyester
POCBX,EC	JV:Chip	ECEA,	ECSZ	ECOS	: Electrol	ytic	
ECMS:Mica		ECOP	: Poly	oroplyle	ne		
Voltage							
ECQ Type	ECQG	ECSZ	Гуре		C	thers	1
	ECQV Type	1					
1H: 50V	05: 50V	OF:3.1		OJ :			35V
	1:100V	1A:10\	J	1A :	10V	50,1H:5	50V
2A:100V							
2A:100V 2E:250V 2H:500V	2:200V	1V:35\ OJ:6.3		1C : 1E.25:	16V	1J :6 2A :1	٠.

Ref. No.	Part No.	Part Name & Description		Pcs
	M	AIN BOARD PARTS		
PCB1	PQWP130810B3	Main P.C. Board Ass'y (RTL)		1
		(ICs)		
IC100	PQVIH63B03XP	IC	- 1	1
IC101	PQWI30810BX3	IC		1
IC102	Not Used			
IC103	PQVIHM6264LA	IC	ļ	1
IC104	PQVITC7H139P	IC		1
IC105	PQVIPD4011BC	IC		1
IC106	PQVITC7H04P	IC IC		1
IC107	PQVIM7H32P	IC	- 1	1
IC108	Not Used		İ	
IC109	POVIMS6242BS	IC	1	1
IC110-112	Not Used	1.2		
IC113	PQVI672191F	IC		1
IC114,115	PQVIMT8870CE	IC		2
IC116	PQVITP5089N	IC	- 1	1
IC117	Not Used	lic.	- 1	
IC118	PQVINJM4558D	IC	ļ	1
IC119-124	Not Used	ıc		6
IC125-130	PQVIM402101P			б
IC131-135	Not Used PQVI671152F	IC IC	- 1	1
IC136 IC200A,200B	PQVI671152F PQVINJM4558D	IC IC	- 1	3
,200C	F CV IINUIVI4220D			3
,200C IC201A,201B ,201C	PQVIPD4066BC	IC		3
IC711	POVISV7860SG	IC		1
IC712	POVIPD4066BC	IC	ļ	1
IC900,901	PQVINJM4558D	IC		3
,902 IC903	PQVIBU3140	ıc		1
			J	
		(TRANSISTORS)		
Q114,115	DTC143XA	Transistor (Si)	1	3
,116				
Q117,118	DTC144A	Transistor (Si)	S	2
Q119,120	DTA143A	Transistor (Si)	S	2
O131,132	2SC2021	Transistor (Si)	⚠	2
Q200A.200B	2SA1626	Transistor (Si)	70	3
.200C		1	1.4.3	
Q201A,201B	2SC2235	Transistor (Si)	Δ.	3
.201C			Δ	3
.201C Q202A.202B	2SC2235 DTC144A	Transistor (Si) Transistor (Si)		
.201C Q202A,202B .202C,203A			Δ	3
.201C Q202A,202B .202C,203A ,203B,203C			Δ	3
.201C Q202A,202B .202C,203A .203B,203C .204A,204B			Δ	3
.201C Q202A,202B .202C,203A .203B,203C .204A,204B .204C,205A			Δ	3
.201C Q202A,202B .202C,203A .203B,203C .204A,204B .204C,205A .205B,205C	DTC144A	Transistor (Si)	Δ	3 12
,201C Q202A,202B ,202C,203A ,203B,203C ,204A,204B ,204C,205A ,205B,205C Q210A,210B		` '	Δ	3
.201C Q202A.202B .202C.203A .203B.203C .204A.204B .204C.205A .205B.205C Q210A.210B .210C	DTC144A	Transistor (Si) Transistor (Si)	Δ	3 12 3
.201C Q202A.202B .202C.203A .203B.203C .204A.204B .204C.205A .205B.205C Q210A.210B .210C Q300A-	DTC144A	Transistor (Si)	Δ	3
.201C Q202A,202B .202C,203A .203B,203C .204A,204B .204C,205A .205B,205C Q210A,210B .210C Q300A- 300H	DTC144A DTA124XA 2SB644	Transistor (Si) Transistor (Si) Transistor (Si)	Δ	3 12 3 8
.201C Q202A.202B .202C.203A .203B.203C .204A.204B .204C.205A .205B.205C Q210A.210B .210C Q300A .300H Q301A	DTC144A	Transistor (Si) Transistor (Si)	Δ	3 12 3
.201C Q202A,202B .202C,203A .203B,203C .204A,204B .204C,205A .205B,205C Q210A,210B .210C Q300A .300H Q301A .301H	DTC144A DTA124XA 2SB644 2SD639	Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si)	Δ	3 12 3 8
.201C Q202A,202B .202C,203A .203B,203C .204A,204B .204C,205A .205B,205C Q210A,210B .210C Q300A .300H Q301A .301H Q301A	DTC144A DTA124XA 2SB644	Transistor (Si) Transistor (Si) Transistor (Si)	Δ	3 12 3 8
.201C Q202A,202B .202C,203A .203B,203C .204A,204B .204C,205A .205B,205C Q210A,210B .210C Q300A .300H Q301A .301H Q302A .302H	DTC144A DTA124XA 2SB644 2SD639 POVTDTC114Y	Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si)	∆\ s	3 12 3 8 8
.201C Q202A,202B .202C,203A .203B,203C .204A,204B .204C,205A .205B,205C Q210A,210B .210C Q300A .300H Q301A .301H Q302A .302H Q302A	DTC144A DTA124XA 2SB644 2SD639	Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si)	Δ	3 12 3 8 8
.201C Q202A.202B .202C.203A .203B.203C .204A.204B .204C.205A .205B.205C Q210A.210B .210C Q300A .300H Q301A .301H Q302A .302H Q303A .303H	DTC144A DTA124XA 2SB644 2SD639 POVTDTC114Y DTA143EA	Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si)	∆\ s	3 12 3 8 8 8
.201C Q202A.202B .202C.203A .203B.203C .204A.204B .204C.205A .205B.205C Q210A.210B .210C Q300A .300H Q301A .301H Q302A .302H Q303A .303H Q304A	DTC144A DTA124XA 2SB644 2SD639 POVTDTC114Y	Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si)	∆\ s	3 12 3 8 8
.201C Q202A,202B .202C,203A .203B,203C .204A,204B .204C,205A .205B,205C Q210A,210B .210C Q300A- 300H Q301A- 301H Q302A- 302H Q303A- 303H Q304A- 304H	DTC144A DTA124XA 2SB644 2SD639 POVTDTC114Y DTA143EA 2SC2021	Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si)	∆\ s	3 12 3 8 8 8
.201C Q202A,202B .202C,203A .203B,203C .204A,204B .204C,205A .205B,205C Q210A,210B .210C Q300A- .300H Q301A- .301H Q302A- .302H Q303A- .303H Q304A- .303H Q304A- .304H Q304A- .304H Q305A-	DTC144A DTA124XA 2SB644 2SD639 POVTDTC114Y DTA143EA	Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si)	∆\ s	3 12 3 8 8 8
.201C Q202A,202B .202C,203A .203B,203C .204A,204B .204C,205A .205B,205C Q210A,210B .210C Q300A .300H Q301A .301H Q302A .302H Q303A .303H Q303A .303H Q304A .304H Q305A .305H	DTC144A DTA124XA 2SB644 2SD639 PQVTDTC114Y DTA143EA 2SC2021 2SA937	Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si)	∆\ s	3 12 3 8 8 8 8 8
.201C Q202A.202B .202C.203A .203B.203C .204A.204B .204C.205A .205B.205C Q310A.210B .210C Q300A .300H Q301A .301H Q302A .302H Q303A .303H Q304A .304H Q305A .305H Q305A	DTC144A DTA124XA 2SB644 2SD639 PQVTDTC114Y DTA143EA 2SC2021 2SA937 2SC1740S	Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si)	s s	3 12 3 8 8 8 8 8 8
.201C Q202A,202B .202C,203A .203B,203C .204A,204B .204C,205A .205B,205C Q210A,210B .210C Q300A- 300H Q301A- 301H Q302A- 302H Q303A- 303H Q304A- 303H Q305A- 305H Q305A- 305H	DTC144A DTA124XA 2SB644 2SD639 POVTDTC114Y DTA143EA 2SC2021 2SA937 2SC1740S DTC144A	Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si)	\$ \$	3 12 3 8 8 8 8 8 8 8
.201C Q202A,202B .202C,203A .203B,203C .204A,204B .204C,205A .205B,205C Q210A,210B .210C Q300A- .300H Q301A- .302H Q302A- .302H Q303A- .303H Q304A- .304H Q305A- .305H Q305A- .305H Q306A-H Q307 Q711	DTC144A DTA124XA 2SB644 2SD639 POVTDTC114Y DTA143EA 2SC2021 2SA937 2SC1740S DTC144A DTC144A	Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si)	s s	3 12 3 8 8 8 8 8 8 8
.201C Q202A,202B .202C,203A .203B,203C .204A,204B .204C,205A .205B,205C Q210A,210B .210C Q300A- 300H Q301A- 301H Q302A- 302H Q303A- 303H Q304A- 303H Q305A- 305H Q305A- 305H	DTC144A DTA124XA 2SB644 2SD639 POVTDTC114Y DTA143EA 2SC2021 2SA937 2SC1740S DTC144A	Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si) Transistor (Si)	\$ \$	3 12 3 8 8 8 8 8 8 8

Ref. No.	Part No.	Part Name & Description		Pcs
	CA	BINET & ELECTRICAL PARTS		
1	PQYM30810BX3	Rear Cabinet Assembly		1
1-1	PQGT10288Z	Name Plate		1
1-2	PQHR9120Y8	Hook		2
1-3	PQUS91Z	Spring, Hook		2
2	PQKE31Z8	Cabinet Door	- 1	1
3	PQYF1T30810B	Front Cabinet Assembly	- 1	1
4	PQBH2Z	Hinge-A		2
5	PQHR9121Z8	Hinge-B		2
6	PQYF230810B3	Inside Cover Assembly		1
6-1	PQUS102Z	Leaf Spring	1	2
6-2	PQHR118Z	Cord Holder-A		1
6-3	PQHR119Z	Cord Holder-B		1
6-4	POHR120Z	Cord Holder-C		1
7	P-01H-F2G1	Battery	İ	1
8	PQUV50Z	Battery Cover		1
	ACCESSOR	IES AND PACKING MATERIALS		
À1	PQQX5391Z	Installation Manual	T	1
A1	PQQX10231Z	Leaflet for Installation Manual		1
A2	POOX5392Z	User Guide		1
A2	PQQX5393Z	User Guide (Spanish)		1
A3	PQHE10Z	Mounting Bracket (Curl Plug)		3
A4	PQHE5008Z	Mounting Bracket (Screw)	1	3
A5	PQJP1E1Z	Plug-A		1
A6	POJP1E2Z	Plug-B		1
Α7	RJP120ZS	Plug, Power Cord	⚠	1
A8	POOX2193Y	Leaflet for Door Opener		1
P1	XZB45X60A05	Protection Cover		1
P2	PQPK1116W	Packing Case	-	1
12	(FOFK HOVE			
P2 P3	POPN9036Y	Cushion Complete (L,R Side)	- 1	1

Ref. No.	Part No.	Part Name & Description	Pcs	Ref. No.	Part No.	Part Name & Desc	ription	Pcs
		(DIODES)		L173	PQLQZM2R2K	Choke Coil	S	1
D101	MA4091	Diode (Si)	1	L300B-300H	POLOZM2R2K	Choke Cail	S	31
D102-105	Not Used			,301A-301H		ł		i
D106-109	1SS131	Diode (Si)	4	,302A-302H		i		ļ
D110	Not Used			,303A-303H				
D111	188131	Diode (Si)	1	L200A,200B	PQLQZK101K	Choke Coil	Δ	6
D112	MA4039	Diode (Si)	1	,200C,202A		1		
D113,114	Not Used	blode (SI)		,202B,202C		1		1
		District (Ci)	1 .		DOLOZKODOK	Chaka Cail	Δ	6
D115	1SV124	Diode (Si)	1	L201A,201B	PQLQZK2R2K	Choke Coil	717	0
D116,117	1SS131	Diode (SI)	2	,201C,203A				
D200A,200B	PQVDS1YB40F1	Diode (Si) ⚠	. 3	,203B,203C	ŀ			
,200C				L300A	PQLQZM2R2K	Choke Coil	S	1
D201A,201B	PQVDHZS2B1	Diode (Si)	. 3	L304	ELEA100KA	Choke Coll		1
,201C	}	''	,	11				
D202A-202C	Not Used		1			(TRANSFORMERS)		
D203A,203B	1SS131	Diode (Si)	6	T100,101	PQLT2D6B	Interface Transformer		2
	100101	Blode (61)	ľ	T200A,200B	ETA14Y85AY	Interface Transformer	⚠	11
,203C,204A		1		11	E I M I 4 I O S M I	interface Transformer	217	l ''
,204B,204C		1	Ι.	,200C				
D205A,205B	MA4047	Diode (Si)	6	H008-A00E,		į		
,205C,206A				T301A-301H	ETE13K38AY	Pulse Transformer		8
,206B,206C			1	11		İ		ļ
D207A-209C	Not Used			11	1	}		1
D210A,210B	155131	Diode (Si)	3		-			
,210C	1	\- '	1	11		(SWITCHES)		1
D300A-300H	MA4047	Diode (Si)	16	SW100	PQSH1A12Z	Switch, Reset		1
I	IVIAGOTI	Diode (Si)	'0	SW101				
,301A-301H	100101	Dinda (Si)		113***101	PQSS2A20Z	Switch, System Program		'
D302A-302H	1SS131	Diode (Si)	16					İ
,303A-303H								1
D304A-304H	Not Used	İ				(RELAYS)		1
D305A-305H	1SS131	Diode (Si)	24	RLY10A,10B	PQSL49Z	Relay		3
,306A-306H				,10C		1		1
.307A-307H				RLY30A-30H	PQSL41Z	Relay		8
D308A-308H	Not Used	Į.				'		1
D309A-309H	Not Used			11		Į		İ
1	188131	Diada (Ci)	24	11				
D310A-310H	155131	Diode (Si)	24			ALADIADI E GADAGITODI		İ
,311A-311H						(VARIABLE CAPACITOR)	1	
,312A-312H				VC100	PQCVTZB30B	Trimmer		1
D390	1SS131	Diode (Si)	1					1
D701	1SS131	Diode (Si)	1					
D902,903	1SS131	Diode (Si)	2			(THERMISTORS)		1
				TH1	PQRRTS104U	Thermistor		1
ļ	•			TH2	PORRTS203U	Thermistor		1
			1	11				
		(VARISTORS)				i		
ZNIDOOA OOD	ED7C07DV000		3] [(PHOTO ELECTIC TRANS	enticene	,l
ZNR20A,20B	ERZC07DK820	Varistor A	3		DOLUTI DECO	1,	^	
,20C	İ			PC200A	PQVITLP520	Photo Coupler	ΔΔ	3
ZNR30A-30H	ERZC03DK241	Varistor	16	,200B,200C				
,31A-31H		<u> </u>		PC201A	POVITLP627	Photo Coupler	Δ	. 3
ZNR32A-32H	ERZC07DK820	Varistor	8	,201B,201C				
SA20A,20B	PQVDDSS301L	Surge Absorber 🐧	6	PC202A	PQVITLP521	Photo Coupler	s A	3
,20C,21A		1	1	,202B,202C		1		1
,21B,21C	1	1	1	11				1
SA22A,22B	PQVDSAE310F1	Surge Absorber	3					1
,22C	. GVOGALSTOI	Co.ge Absorber	"	11				1
,220			1	11		(CAPACITORS)		1
			1	110101	ECEMELIANA	1'		.
		Lanuary costs trans	1	C101	ECEA1EU101	100		1
1		(CRYSTAL OSCILLATORS)	I	C102-106	Not Used	_		1
X100	PQVCK6000N3Z	Crystal Oscillator	1	C107	ECQM1H472JV	0.0047		1
X101	PQVCX3579H5R	Crystal Oscillator S	1	C108,109	Not Used	l		1
X102	PQVCX4000N8Z	Crystal Oscillator S	1	C110,111	ECKD1H103KB	0.01	S	2
X103	POVCL3276N4Z	Crystal Oscillator	1	C112,113	ECCD1H150JC	15P	S	2
			1	C114,115	ECCD1H220JC	22P	-	2
1			1	C116,117	Not Used	 '		1
		COMPONENT COMPINATIONS	1	C118		10		1
7400 101	EVDD00 (30)	(COMPONENT COMBINATIONS)	1 _	1 1	ECEA1HU100	1'0		1 '
Z100,101	EXBP88473K	Resistor Array S	3	C119,120	Not Used	1, 200		
,102		L	1	C121	ECKD1H223MD	0.022	S	1
Z107	PQRS8B3223J	Resistor Array	1	C122,123	ECQV1H104JZ	0.1		2
Z110	EXBP88222K	Resistor Array S	1	C124	ECKD1H103KB	0.01	S	1
	!		1	C125,126	ECQV1H104JZ	0.1		3
			1	127				1
		(COILS)	1	C128-129	Not Used			1
L100-103	ELEPK820KA	Choke Coil S	4	C130	ECKD1H102JA	0.001	s	1 1
	II .	i .	1	1 1		10.001	J	I '
L104	POLOZM2R2K	Choke Coil S	1 1	C131-134	Not Used	1	_	1
L105-109	Not Used	1	1	C135	ECKD1H223MD	0.022	S	1
	PQLQZM2R2K	Choke Coil S	3	C136	ECUV1H223MD	0.022	S	1
L110,111						0.022	S	

Ref. No.	Part No.		Part Name & Description	Pcs	Ref. No.	Part No.	Value	Pcs
C139	ECKD1H223MD	0.022	S	1	C905	ECQM1H682JV	0.0068	1
C140	Not Used			1	C906,907	Not Used		
C141	ECUV1H223MD	0.022		1	C908	ECQM1H222JV	0.0022	1
C142	ECOV1H104Z	0.1		1	C909	ECKD1H102JA	0.001 S	1
C143	Not Used				C910,911	ECEA1HU4R7	4.7	2
C144	ECUV1H223MD	0.022	S	1	C912	ECQV1H333JZ	0.033	1
C145-147	Not Used		_		C913	ECKD1H102JA	0.001 S	1
C148,149	ECUV1H223MD	0.022	S	2	C914-916	Not Used		1
C149	Not Used			İ .	C917	ECEA1EU470	47	1
C150	ECUV1H223MD	0.022		1	C918	ECQM1H332JV	0.0033	1
C151,152	Not Used		_		C919	Not Used		
C153	ECCD1H151JC	150P	S	1	C920	ECKD1H681KB	680P	1
C154	Not Used				C921	ECCD1H151JC	150P S	1
C155	ECUV1H223MD	0.022	S	1				i
C156	ECKD1H223MD	0.022	S	1		}		
C157-159	Not Used		_		II		(RESISTORS)	į
C160	ECKD1H223MD	0.022	S	1	R101	ERDS2TJ272	2.7k	1
C161	ECQV1H104JZ	0.1		1	R102-105	Not Used		
C162	ECEA1EU101	100	S	1	R106	ERDS2TJ821	820	1
C163	ECQV1H104JZ	0.1		1	R107-109	Not Used		
C164-167	Not Used	1		1	R110-118	ERDS2TJ151	150	9
C168	ECEA1CSS332	3300		1	R119-121	Not Used		
C169,170	ECEA1EK470	47		2	R122	ERDS2TJ103	10k	1
C171-179	Not Used				R123	ERDS2TJ223	22k	1
C180	ECQV1H104JZ	0.1		1	R124	Not Used		
C190	ECEA1HU2R2	2.2		1	R125	ERDS2TJ105	1M	1
C200A,200B	ECQE2E474KZ	0.47	Δ	3	R126	ERDS2TJ222	2.2k	1
,200C				1	R127,128	ERDS2TJ103	10k	2
C201A,201B	ECEA1HU220	22		3	R129	ERDS2TJ561	560	1
,201C		1			R130	ERDS2TJ681	680	1
C202A,202B	ECEA1HU100	10	Δ	3	R131	ERDS2TJ103	10k	1
,202C		1			R132	Not Used	ĺ	
C203A,203B	ECEA1HU220	22	Δ	3	R133,134	ERDS2TJ473	47k	2
,203C					R135	Not Used		
C204A,204B	ECQV1H473MD	0.047		3	R136	ERDS2TJ103	10k	1 1
.204C					R137	PQ4R18XJ223	22k	1 1
C205A,205B	ECUV1H563MD	0.056		6	R138,139	Not Used		
,205C,206A					R140	ERDS2TJ104	100k	1 1
206B,206C				!	R141	ERDS2TJ333	33k	1 1
C207A,207B	ECUV1H121JC	120P		3	R142	ERDS2TJ334	330k	1 1
207C					R143	ERDS2TJ104	100k	1 1
C208A,208B	ECQM1H183JV	0.018		3	R144	ERDS2TJ333	33k	1 1
,208C					R145	ERDS2TJ334	330k	1 1
C209A,209B	ECUV1H183KB	0.018		3	R146	ERDS2TJ472	4.7k	lil
,209C					R147	ERDS2TJ683	68k	
C210A,210B	ECUV1H563MD	0.056		6	R148,149	Not Used		'
,210C,211A				-	R150	ERDS2TJ102	1k	1 1
,211B,211C				•	R151	ERDS2TJ333	33k	1
C212A,212B	ECUV1H121JC	120P		3	R152	ERDS2TJ223	22k	
.212C		1			R153,154	ERDS2TJ102	1k	2
C220A,220B	ECKDKC222KB	0.0022	Δ	3	R155-158	ERDS2TJ103	10k	4
,220C		10,000	45		R159	PQ4R18XJ472	4.7k	
C221A,221B	ECKD1H102JA	0.001	S	3	R160	ERDS2TJ103	10k	
,221C		10.00	J	Ŭ	R161	PQ4R18XJ472	4 =4	
C250	ECEA1EU102	1000		1	R162	ERDS2TJ103	10k	
C300A-300G	ECEA1HU2R2	2.2		7	R163	PQ4R18XJ472	4.7k	1 1
C300H	ECEA1HKS2R2	2.2		1	R164	ERDS2TJ103	10k	1 1
C301A-301H	ECEA1HU3R3	3.3	S	16	R165-168	Not Used	Tok	. ' :
,302A-302H	LOCATIOSIS	3.3	3	10	R169,170	t .	laal.	
C303A-303H	ECEA1HU4R7	4.7		,		ERDS2TJ223	22k	2
C304A-304H	ECUV1H103KB	0.01	•	8	R171,172	Not Used		l
l	LECOVINIUSKB	0.01	S	16	R173	Not Used		
,305A-305H C306A-306H	ECE A 1 WILLOW	1			R174	ERDS2TJ225	2.2M	1 1
C306A-306H C390	ECEA1HU010	1		8	R175	ERDS2TJ154	150k	1 1
	ECEA1VUAZI	100		1	R176	ERDS2TJ223	22k	1
C400	ECEA1VU471	470	^	1	R177-184	Not Used	100	
C500-504	ECKD1H223MD	0.022	S	5	R185	ERDS2TJ103	10k	1
C511,512	ECQV1H273JZ	0.027		3	R186-189	Not Used	1.0	
,513	ECEAULIA DE	1		_	R190,191	ERDS2TJ103	10k	2
C711, 712	ECEA1HU4R7	4.7		2	R192	ERDS2TJ102	1k	1
C713	ECQV1H104JZ	0.1		1	R193	Not Used		
C714	ECEA1HU100	10		1	R194,195	PQ4R18XJ472	4.7k	2
C900	ECQV1H473JZ	0.047		1	R196,197	PQ4R18XJ222	2.2K	2
C901	ECQV1H104JZ	0.1		1	R200A,200B	PQRD12TJ223	22k S 🐧	3
C902	ECQM1H332JV	0.0033		1	.200C		1	
	ECQV1H683JZ	0.068		1	R201A,201B	ERDS2TJ122	1.2k	3
C903 C904	ECQV1H104JZ	0.1			,201C		1	" 1

Ref. No.	Part No.	Part	Name & Description		Pcs	Ref. No.	Part No.	Part Name & Description	Pcs
R202A,202B	ERDS2TJ104	100k		Δ	3	R320A-320H	PQRD2TJ102	1k	8
,202C R203A,203B	ERDS2TJ472	4,7k		Δ	3	R330A-330H R390	Not Used ERDS2TJ822	8.2K	1
,203C						R391,392	ERDS2TJ103	10k	2
R204A,204B ,204C	ERDS2TJ5R6	5.6		Δ	3	R500,501	ERDS2TJ562 ER016CKF1151	5.6k 1.15k	3
R205A-205C	Not Used					,502	Engreen Trans		
R206A,206B ,206C	ERDS2TJ103	10k		Δ	3	R503-510 R511,512	ER016CKF49R9 ER016CKF6491	49.9 6.49k	8
R207A,207B	ERDS2TJ472	4.7k		Λ	3	,513	LINGTOCKI 0491	0.431	,
,207C	EDDOST 1000	200	S	Δħ	2	R514-521 R522,523	ER016CKF1101	1.1k 11.15k	8 2
R208A,208B ,208C	ERD25TJ390	39	3	۵.	3	R701	ER016CKF1151 ERDS2TJ821	820	1
R209A,209B	ERDS2TJ102	1k			3	R702	ERDS2TJ102	1k	1
,209C R210A,210B	ERDS2TJ183	18k			3	R710 R711	ERDS2TJ122 ERDS2TJ473	1.2k 47k	1
,210C						R712,713	ERDS2TJ104	100k	2
R211A,211B ,211C	ERDS21J392	3.9k			3	R714 R715	ER016CKF1104 ERDS2TJ122	1.1M 1.2k	1
R212A.212B	PQ4R18XJ122	1.2k			3	R716,717	ERDS2TJ473	47k	2
,212C R213A,213B	PQ4R18XJ122	1.2k			3	R900,901	ERDS2TJ104	100k	3
,213C	FQ4H16X3122	1.25			3	R903	ERDS2TJ224	220k	1
R214A,214B	PQ4R18XJ391	390			3	R904 R905-911	ERDS2TJ124 Not Used	120k	1
,214C R215A,215B	PQ4R18XJ122	1.2k			3	R912,913	ERDS2TJ103	10k	3
,215C		}				.914			
R216A,216B ,216C	ER016CKF1003	100k			3	R915-918 R919	Not Used ERDS2TJ123	12K	1
R217A,217B	PQ4R18XF1003	100k			3	R920	ERDS2TJ103	10k	1
,217C R218A,218B	PQ4R18XF3003	300k			3	R921 R922	ERDS2TJ563 ERDS2TJ102	56k 1k	1
,218C	r Garrioxi 3003	3001			, ,	R923	ERDS2TJ223	22k	1
R219A,219B	ER016CKF3003	300k			6	R924	ERDS2TJ273	27k 680	1
,219C ,220A,220B						R925	ERDS2TJ681 ERDS2TJ103	10k	1
,220C						R927	ERDS2TJ183	18k	1
R221A,221B ,221C,222A	ERDS2fJ122	1.2k			9	R928 R929	ERDS2TJ103 ERDS2TJ333	10k 33k	
,222B,222C						R930	ERDS2TJ222	2.2k	1
,223A,223B ,223C						R931 R932.933	ERDS2TJ334 ERDS2TJ472	330k 4.7k	1 2
R224A,224B	ERDS2TJ471	470			6	R934,935	ERDS2TJ332	3.3k	2
,224C,225A ,225B,225C		İ				R950 R951	ERDS2TJ273 ERDS2TJ393	27k 39k	1 1
R226A,226B	ERDS2TJ122	1.2k			3	R999	ERDS2TJ183	18k	1
,226C	EB0460VE4000	1001			6				
,227C,228A	ER016CKF1003	100k			б			(OTHERS)	
,228B,228C						E 101	PQJJ1D3Z	Jack, External Music	1
R229A,229B ,229C	ER016CKF3003	300k			3	E 102	PQJJ1G1Z PQJJ1TA3Y	Jack, Paging Jack,CO (MJ1A, MJ1B, MJ1C) A	3
R230A-230C	Not Used					E 104	PQJJ1TB16Z	Jack, Station Modular (MJ2A-2H)	8
R231A,231B ,231C,232A	ERDS2TJ473	47k			6	E 105	PQJP14D49Z PQJP2F4Z	Connector Plug, 14P (CN7) Connector Plug, 2P	1 1
,231C,232A ,232B,232C						E 107	PQJP4D14Z	Connector Plug, 4P (CN6)	1
R233A,233B	ERDS2TJ473	47k			6	E108	PQJP7G3Z	Connector Plug, 7P (CN5)	1
,233C,234A ,234B,234C						E109 E110	PQJP8D3Z PQJP3D9Z	Connector Plug, 8P (CN4) Connector Plug, 3P (CN8)	1
R235A,235B	ERDS2TJ683	68k			3	E111	PQJJ1TB25Y	Jack, (MJ3)	1
,235C R300A, 300B	PQ4R18XJ220	22			2				
R300C-300H	PQ4R18XJ220	22			6		POWER REC	GULATOR BOARD PARTS	
R301A-301H R302A-302H	ERDS2TJ682 ERDS2TJ220	6.8k 22			8 8	PCB2	PQWP230810M1	Power Regulator P.C. Board	1
R303A-303H	ERDS2TJ682	6.8k			8	11.002	. 3111 2500101011	Ass'y (RTL)	
R304A-304H	Not Used								
R305A-305H R306A-306H	Not Used Not Used							(ICs)	
R307A-307H	ERDS2TJ121	120			8	IC1	AN78L18	ic s	1
R308A-308H R309A-309H	ERDS2TJ121 ERDS2TJ101	120 100			8 8	IC2 IC3	Not Used AN78M12F	IC S	1
R310A-310H	ERDS2TJ222	2.2k			8	IC4,5	Not Used		
R311A-311H R312A-312H	ERDS2TJ472 ERDS2TJ3R3	4.7k 3.3			8 8	IC6 IC7.8	PQVIPD4069UC AN78M15F	IC S	1 2
R319A-319H	ERDS2TJ102	1k			8		,	J	

Ref. No.	Part No.	Part Name & De	scription	Pcs	Pcs	Ref. No.	Part Name & Description	Pcs
	-	(TRANSISTORS)		 	R22,23,24	Not Used		
Q1	2SD1275	Transistor (Si)		1	R25,26	ERDS2TJ272	2.7k	2
Q2	2SD637	Transistor (Si)		1	R27,28	ERDS2TJ223	22k	2
Q3	2SD1406	Transistor (Si)		1	R29,30	PORD1VJ3R3	3.3	2
Q4,5	2SC2021	Transistor (Si)		2	R31	PORD12TJ101	100	1
Q6	DTC143XA	Transistor (Si)		1	11131	T GIND IZIOIOI	100	i '
Q7,8	2SD1406	Transistor (Si)		2				
Q9,10	DTC144A	Transistor (Si)	s	2	11		(OTHERS)	
C/9,10	DICI44A	Transistor (Si)	3	2	11-,	VD A 4 C4 ENII 14 00	1.	
					E1	XBA1C15NU100	Fuse (F2,F3)	2
				1	E2	PQJP5D30Z	Connector Plug, 5P (CN1)] 1
		(DIODES)			E3	PQJP5D48Z	Connector Plug, 5P (CN2)	1
D1	PQVD2B4B41	Diode (Si)		1	E4	PQJP5D7Z	Connector Plug, 5P (CN3)	1
D2A, 2B	PQVDD1NL20	Diode (Si)		2	E5	PQJS7L30Z	Connector Socket, 7P (w/Lead)	1
D3,4	1SR35-200	Diode (Si)	S	2			(J5)	ļ
D5	Not Used	1			E6	PQJS8L30Z	Connector Socket, 8P (w/Lead)	1
D6	MA1068	Diode (Si)	s	1			(J4)	
D7	MA4200	Diode (Si)	-	1	E7	PQJS3L32Z	Connector Socket, 3P (J8)	1
D8	Not Used	D.000 (0.)		'	11-1	I GOOGESEE	Commedian Socket, or (00)	l '
	1SR35-200	Di-4- (Ci)	s		1	<u> </u>	LED BOARD PARTS	L
D9,10,11		Diode (Si)	5	3	11		LED BOARD PARTS	
D12	MA4091	Diode (Si)		1	11	Table 1	1. == = =	r .
D13	MA4062	Diode (Si)	_	1	PCB3	PQWP3T30810M	LED P.C. Board Ass'y (RTL)	1
D14,15	1SR35-200	Diode (Si)	S	2	11			l
D16	Not Used				11			l
D17	1SR35-200	Diode (Si)	S	1	11		(DIODES)	l
D18	MA4051	Diode (Si)		1	D800	LN220RPH	LED	1
D19	1SS131	Diode (Si)		1	D801	LN420YPH	LED	1
		` '			D802	LN320GPH	LED	1
					11000	L'HOLOGI II		l '
		(RELAY)						
DI VI	PQSL50Z			١.	{		(OTHERO)	
RLY1	PGSL50Z	Relay		1		00.10.100.17	(OTHERS)	l .
		<u> </u>			E800	PQJS4R31Z	Connector Socket, 4P (w/Lead)	1
		İ			11		(J6)	1
		(CAPACITORS)			E801	PQHR402Z	Spacer, LED	1
C3	EECW0H104Z1N	100000		1 1	11			1
C4	Not Used					POWE	R SUPPLY PARTS	
C5	ECET35S222SW	2200		1 1	11			
C6	ECET50S682SW	6800		1 1	PCB4	PQWP430810X1	Power P.C. Board Ass'y (RTL)	1
C7	ECET35S222SW	2200		1			(with/ C601, C602, C604, C605,	
C8	ECEA1HU101	100		1	11		ZNR600, L600, E603, E604	
C9	ECEA1VU471	470		1		į	and E606)	
C10	Not Used	1470		'			and Eddo)	
	4	1400						
C11	ECEA1EU101	100		1				ł
C12	Not Used				11.	1	(CAPACITORS)	ł
C13	ECEA1EU331	330		1	C601,602	ECKDKC222KB	0.0022 S	2
C14	ECEA1HU100	10	S	1 1	C604,605	ECQU2A473MN	0.047	2
C15,16	ECKD1H103KB	0.01		2				
C17	ECEA1AU222	2200	S	1				
C18	ECEA1HU100	10	s	1			(VARISTOR)	
C19	ECEA2AN100	10	-	1	ZNR600	ERZC14DK471U	Varistor	1
C20	Not Used	'"		1 '	112	[· arrotor	'
		100		1 .	11		1	l
C21	ECEA1HU101	100		1	11		LOWITOUR	1
		1		1	Haus		(SWITCH)	1
				1	SW1	EST15704V	Switch, Power	1
		(RESISTORS)			SW2	PQSR4A03Z	Switch, Voltage Selector	1
R1	ERDS2TJ332	3.3k		1	11			
R2	ERDS2TJ102	1k		1	11		(TRANSFORMERS)	
R3	ERDS2TJ472	4.7k		1	_{T1}	PQLT5M9X4A	Power Transformer	1
	ERDS2TJ332	3.3k		1	T2	PQLT1K9M1A	Bell Transformer	1
R4	ERDS2TJ122	1.2k		1	11'] GET INSMITA	Son Hansionner	l '
R4				1 !	H		Į į	1
R5	LEDDCOT 1400			1	11		l.oou.	
R5	ERDS2TJ102	1k		1			(COIL)	I
R5	ERDS2TJ102	18			11			
R5 R6					L600	PQLE61	Coil	1
R5 R6	ERDS2TJ472	4.7k		1	L600	PQLE61		1
R5 R6 R7 R8	ERDS2TJ472 ERDS2TJ223	4.7k 22k		1	L600	PQLE61	Coil	1
R5 R6 R7 R8	ERDS2TJ472	4.7k		1	L600	PQLE61		1
R5 R6 R7 R8 R9,10	ERDS2TJ472 ERDS2TJ223	4.7k 22k		1	L600	PQLE61 PQWAT616BX	Coil	1
R5 R6 R7 R8 R9,10 R11,12	ERDS2TJ472 ERDS2TJ223 ERDS2TJ683	4.7k 22k 68k		1 2			Coil (OTHERS)	
R5 R6 R7 R8 R9,10 R11,12 R13	ERDS2TJ472 ERDS2TJ223 ERDS2TJ683 PORD2VJ2R7 ERDS2TJ102	4.7k 22k 68k 2.7		1 2 2	E600 E601	PQWAT616BX PQUV36Y	Coil (OTHERS) Power Cord Assembly Power Box Cover	1 1
R5 R6 R7 R8 R9,10 R11,12 R13 R14	ERDS2TJ472 ERDS2TJ223 ERDS2TJ683 PORD2VJ2R7 ERDS2TJ102 Not Used	4.7k 22k 68k 2.7		1 2 2 1	E600 E601 E602	POWAT616BX POUV36Y POUV37Y	Coil (OTHERS) Power Cord Assembly Power Box Cover Power Box	1 1 1
R5 R6 R7 R8 R9,10 R11,12 R13 R14 R15	ERDS2TJ472 ERDS2TJ223 ERDS2TJ683 PORD2VJ2R7 ERDS2TJ102 Not Used ERDS2TJ471	4.7k 22k 68k 2.7 1k		1 2 2 1	E600 E601 E602 E603	POWAT616BX POUV36Y POUV37Y POJP7C1Z	Coil (OTHERS) Power Cord Assembly Power Box Cover Power Box Connector Plug, 7P	1 1 1 1
R5 R6 R7 R8 R9,10 R11,12 R13 R14 R15 R16	ERDS2TJ472 ERDS2TJ223 ERDS2TJ683 PORD2VJ2R7 ERDS2TJ102 Not Used ERDS2TJ471 ERDS2TJ472	4.7k 22k 68k 2.7 1k 470 4.7k		1 2 2 1	E600 E601 E602	POWAT616BX POUV36Y POUV37Y	Coil (OTHERS) Power Cord Assembly Power Box Cover Power Box Connector Plug, 7P Connector Socket, 7P (w/Lead)	1 1 1
R5 R6 R7 R8 R9,10 R11,12 R13 R14 R15 R16 R17	ERDS2TJ472 ERDS2TJ223 ERDS2TJ683 PORD2VJ2R7 ERDS2TJ102 Not Used ERDS2TJ471	4.7k 22k 68k 2.7 1k 470 4.7k 22k		1 2 2 1	E600 E601 E602 E603	POWAT616BX POUV36Y POUV37Y POJP7C1Z POJS5L30Z	Coil (OTHERS) Power Cord Assembly Power Box Cover Power Box Connector Plug, 7P Connector Socket, 7P (w/Lead) (J3)	1 1 1 1
R5 R6 R7 R8 R9,10 R11,12 R13 R14 R15	ERDS2TJ472 ERDS2TJ223 ERDS2TJ683 PORD2VJ2R7 ERDS2TJ102 Not Used ERDS2TJ471 ERDS2TJ472	4.7k 22k 68k 2.7 1k 470 4.7k		1 2 2 1	E600 E601 E602 E603	POWAT616BX POUV36Y POUV37Y POJP7C1Z	Coil (OTHERS) Power Cord Assembly Power Box Cover Power Box Connector Plug, 7P Connector Socket, 7P (w/Lead) (J3) Bracket, Power Box	1 1 1 1
R5 R6 R7 R8 R9,10 R11,12 R13 R14 R15 R16 R17	ERDS2TJ472 ERDS2TJ223 ERDS2TJ683 PORD2VJ2R7 ERDS2TJ102 Not Used ERDS2TJ471 ERDS2TJ472 ERDS2TJ472	4.7k 22k 68k 2.7 1k 470 4.7k 22k		1 2 2 1 1 1 1 1 1 1	E600 E601 E602 E603 E604	POWAT616BX POUV36Y POUV37Y POJP7C1Z POJS5L30Z	Coil (OTHERS) Power Cord Assembly Power Box Cover Power Box Connector Plug, 7P Connector Socket, 7P (w/Lead) (J3)	1 1 1 1
R5 R6 R7 R8 R9,10 R11,12 R13 R14 R15 R16 R17	ERDS2TJ472 ERDS2TJ223 ERDS2TJ683 PORD2VJ2R7 ERDS2TJ102 Not Used ERDS2TJ471 ERDS2TJ472 ERDS2TJ472 ERDS2TJ473	4.7k 22k 68k 2.7 1k 470 4.7k 22k 47k		1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	E600 E601 E602 E603 E604	POWAT616BX POUV36Y POUV37Y POJP7C1Z POJS5L30Z	Coil (OTHERS) Power Cord Assembly Power Box Cover Power Box Connector Plug, 7P Connector Socket, 7P (w/Lead) (J3) Bracket, Power Box	1 1 1 1 1

ORDER NO. KM48808739C1

Service Manual

EASA-PHONE

ELECTRONIC MODULAR SWITCHING SYSTEM

KX-T30810-1



SPECIFICATIONS/TEXHUYECKUE XAPAKTEPUCTUKU
NAME AND LOCATION/HAUMEHOBAHUE И РАСПОЛОЖЕНИЕ

CONNECTION/ПОДСОЕДИНЕНИЕ

PROGRAMMING/ПРОГРАММИРОВАНИЕ

ІС І/О DATA/ЦОКОЛЕВКА И ФУНКЦИОНАЛЬНОЕ НАЗНАЧЕНИЕ ВЫВОДОВ

МИКРОСХЕМ

ADJUSTMENTS/PETYJUPOBKU

BLOCK DIAGRAM/БЛОК-СХЕМА

SCHEMATIC DIAGRAMS/ПРИНЦИПИАЛЬНЫЕ СХЕМЫ

WIRING CONNECTION DIAGRAM/CXEMA СОЕДИНЕНИЙ

IC BLOCK DIAGRAM/БЛОК-СХЕМА ИНТЕГРАЛЬНЫХ МИКРОСХЕМ

TERMINAL GUIDE OF IC'S, TRANSISTORS AND DIODES/LOKO/JEBKA

ИНТЕГРАЛЬНЫХ СХЕМ, ТРАНЗИСТОРОВ И ДИОДОВ

EXPLODED VIEW/СБОРОЧНЫЙ ЧЕРТЕЖ

ACCESSORIES AND PACKING MATERIALS/ПРИНАДЛЕЖНОСТИ И

УПАКОВОЧНЫЕ МАТЕРИАЛЫ

REPLACEMENT PARTS LIST/CПИСОК ЗАПАСНЫХ ЧАСТЕЙ

Matsushita Services Company 50 Meadowland Parkway, Secaucus, New Jersey 07094 Panasonic Hawali Inc. 99-859 Iwaiwa Street P.O. Box 774 Honolulu, Hawaii 96808-0774

Metsushita Electric of Canada Limited 5770 Ambier Drive, Mississauga, Ontario, L4W 2T3 Panasonic Sales Company, Division of Matsushita Electric of Puerto Rico, Inc. Ave. 65 De Infanteria, KM 9.7 Victoria Industrial Park Carolina, Puerto Rico 00630



SPECIFICATIONS

General Description

_		0. 10 001	
		Stations	8
1.	Capacity	Outsides (CO)	3

2. Control Method Stored Program CPU: 8 bits CPU, 4 bits CPU

Control ROM: 48 KB, Control RAM: 8 KB

Secondary Station Supply Volt: +26 V,

Circuit Volt: +5 V, +12 V, +18 V, +26 V

Power Failure •3 outsides assigned to stations (1 through 3) ...power failure transfer

•System operation for 4 hours by optional Backup Adaptor.

5. Dialing......Outward Dia

Dial Pulse 10PPS

Tone Dial

Internal Dial Pulse 10PPS, 20PPS

Tone Dial

Mode Conversion

6. Connector Outsides (CO)

DP-DTMF, DTMF-DP Modular Jack (RJ-11)

Station

Modular Jack `

Paging Output External Music Input Pin Jack (PCA JACK) two-conductors Jack (MINI JACK %4 inch

diameter)

7. EXT ConnectionCable

1 pair wire (Standard Telephone) 2 pair wire (KX-T30830/KX-T30820)

(13⁶/₃₂"×17⁷/₃₂"×4⁷/₃₂")

Characteristics

Standard Telephone 600 ohms including set

Doorphone 20 ohms

2. Minimum Leak Resistance15,000 ohms

3. Maximum Number of Station

4. Ring Voltage90 Vrms at 20 Hz depends on Ringing Load

Design and specifications are subject to change without notice.



Matsushita Electric Industrial Co. Ltd. Made in Japan Part No. T241ZA

(Model KX-T30810)



 There are 2 types of model KX-T30810, such as KX-T30810 and KX-T30810-1.

2. The model KX-T30810-1, have a mark ① on the name plate in figure left.

3. Please use this manual for model KX-T30810-1.

Matsushita Electric Industrial Co. Ltd. Made in Japan Part No. T373ZA (Model KX-T30810-1)

KX-T30810-1

NAME AND LOCATION

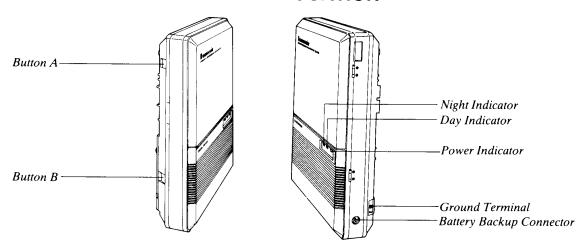


Fig. 3

Push Buttons A and B simultaneously to open Front Cover.

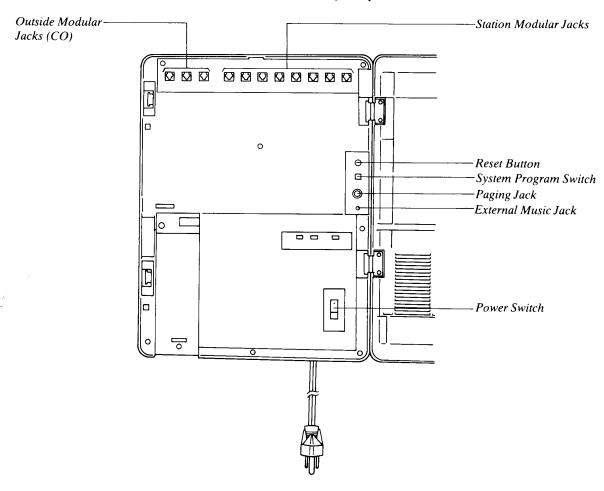


Fig. 4

CONNECTION

Cautions

Speaker

- 1. Do not wire the telephone cable in parallel with the AC power source, computer, telex, etc. If the cables run near those wires, shield the cables with metal tube or use shield cables and ground the shields.
- 2. When cables run on the floor, use protectors or the like to protect the wires where they may be stepped on. Avoid wiring under carpets.
- 3. Avoid using the same AC 120 V power supply outlet for computers, telexes, and other office equipment. Otherwise, KX-T30810 system operation may be interrupted by the induction noise from such equipments.
- 4. Please use one pair telephone wire for extension connection of (telephone) equipments such as standard telephone, data terminal, answering machine, computer, etc., except proprietary telephone KX-T30830, KX-T30820, KX-T30850 etc.).

Amplifier

(One pair)

(One pair)

(Voice Data Terminal)

Standard Telephone

ee e

886

Data

(One pair)

After all the connections are completed, turn the Power Switch ON.

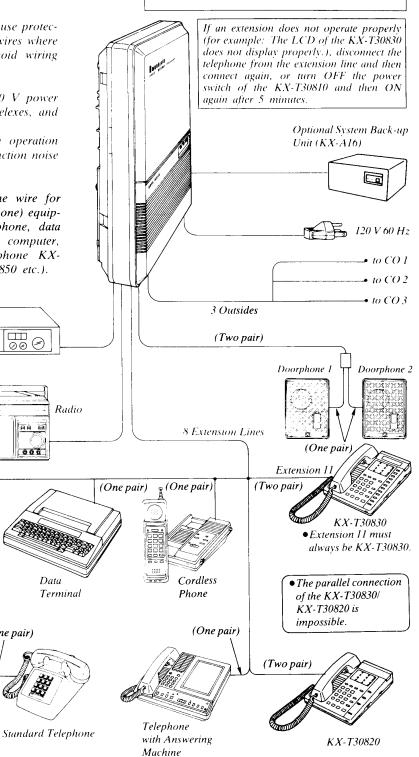


Fig. 5

PROGRAMMING

Programming Instructions

1. At extension 11:

All system programming changes (example: system clear, station program clear, toll restriction, hookswitch flash timing...) are done through extension 11.

- •Extension 11 must always be a Panasonic model, KX-T30830.
- 2. System Program Switch setting:

The System Program Switch located on the KX-T30810 must be set to the PROGRAM position while making program changes. After all programming changes are completed, return the program switch to the SET position.

3. Overlay:

This overlay is used for programming the system and the program function names on buttons are inscribed on this card. Refer to page 7.

- **4.** Before system programming, you may operate system clear and station program clear to set default data of programming.
 - A. System Clear:
 - 1 Dial (99).
 - "SYSTEM CLEAR" will be displayed.
 - 2 Press the NEXT button.
 - •"ALL CLEAR?" will be displayed.
 - 3 Press the MEMORY button to clear system.
 - 4 To exit from system clear, press the END button

The following features are preset as the default data.

Date and Time

System Speed Calling

CO Connection Assignment

Dial Mode (Tone/Pulse) Selection

Switching Mode (Day/Night Service)

Starting Time (Day/Night Service)

Flexible Day Outward Dialing Assignment

Flexible Night Outward Dialing Assignment

Flexible Day Ringing Assignment

Flexible Night Ringing Assignment

Toll Restriction—Class Assignment

Toll Restriction—Area Code Selection

Programmable Operator Call

Host PBX Access Codes Assignment

Automatic Answering (Automatic/Manual)
Selection

Preferred Line Assignment Programmable Call Waiting Duration Time Count Start Mode Hookswitch Flash Timing Disconnect Time Calling Party Control (CPC) Signal Intercom Alerting Mode Programmable Doorphone Dial Call Pickup Group Assignment Busy Tone Selection Hold Time Reminder Hold Recall Time Set Programmable External Paging Access Tone DTMF Receiver Programmable Toll Prefix Programmable Secret Auto Dial

B. Station Program Clear:

- 1 Dial (98).
 - •"EXT CLEAR" will be displayed.
- 2 Press the NEXT button.
 - •"ALL CLEAR?" will be displayed.
- 3 Press the MEMORY button to clear the system.
- 4 To exit from station clear, press the END button.

The following features are preset as the default data.

One Touch Dialing

Background Music

Call Forwarding

Data Line Security

Dial Call Pickup Denv

Do not Disturb

When the System Program Switch on the KX-T30810 is set to the PROGRAM position, the operation of the KX-T30830 will change as follows.

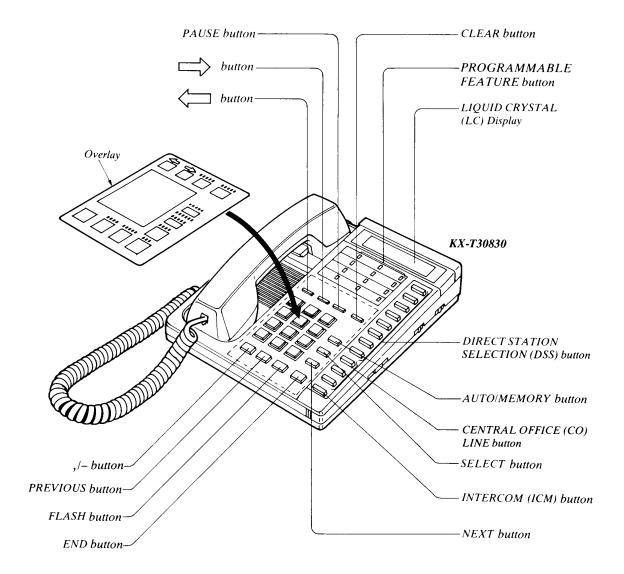


Fig. 6

Notes: 1. For details of installation, refer to the Installation Manual (Part No. PQQX5289Z).

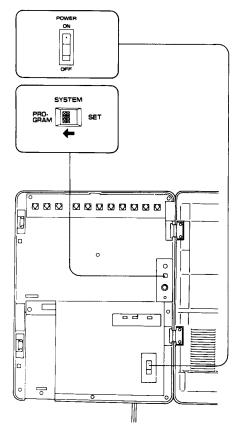
2. For details of operation, refer to the User Guide (Part No. PQQX5291Z).

Example of Programming

- 1. Turn the Power Switch to ON
- 2. Set the System Program Switch to PROGRAM ...
 The LCD on the KX-T30830 shows "ENTER PGM CODE".
 - Be sure the handset of the extension 11 is in the cradle and the speakerphone button of the extension 11 is off.
- **3.** To program automatic line access number 9 and the phone number 987-654-3210 into memory location (speed dial access) number 00.

	KX-T30830 at e. (Extension 11 must alwa	
1.	Dial (01) or press the AUTO button.	Display SPEED CALLING
2.	Press the NEXT button.	ENTER SPEED CODE
3.	Dial (00) or press the NEXT button.	●If nothing is stored in access code "00", 00: NOT STORED ●If already stored the automatic line access number 9 and the phone number 123-456-7890, 00: -123-456-7890
4.	 Dial "9". Press "—" button. Dial "987". Press "—" button. Dial "654". Press "—" button. Dial "3210". 	00: -987-654-3210
5.	Press the MEMORY button.	00: -987-654-3210
6.	 To program a next access button. To program a desired acc SELECT button and their 	cess code, press the
7.	Repeat step 4 to 6.	
8.	To return to the initial program mode, press the END button.	ENTER PGM CODE

- 4. Return the System Program Switch to SET
- To make program change, start from the beginning.



While programming if a mistake is made,

- 1. Press the "END" button.
- 2. Start programming procedure from the beginning.
- •You will hear the beeps after press the MEMORY button.
- The MEMORY indicator light goes on when the MEMORY button is pressed, and then Indicator light goes out when the NEXT or PREV button is pressed.

■ PROGRAMMING TABLE

TO SET	PROGRAM ADDRESS	STEPS R	EQUIRED	TO C	HANG	EP	RO	GRA	M		
Date and Time	[00]	[NEXT] [A] [♦] [SELECT]	[\$] [B] [\$] [SELEC	CT] (\$) [C) [SE	ĻECT] [MEN	IORY] [END]		
			year month day day of the hour minute AM/PM week								
System Speed Calling	[01]	[NEXT] [AB] [CD] [phone i	number] [MEMOR)	Y]							
Entry	or	[9]: aut	tomatic line access nough [83]: outside i	iumber							
	[AUTO]	[81] thr	ough [83]: outside i	line acces:	s number						
		speed access									
	1	•To advance to the next co	ode.	1000							
		[SELECT] [AB] [CD] [pho		IURYJ							
CO Connection	[02]	[NEXT] [NEXT] [SELECT	_								
Assignment			·· CONNECT/NO (the desired CO nun								
			Default		To make pro	ram ch	ange]		
		CO(s)	all CO's	11				3	1		
		Connect	×				ـــــ		_		
		No connect		L			<u> </u>				
Dial Mode (Tone/Pulse) Selection	[03]] [MEMORY] [END - TONE/PULSE the desired CO nur		ears						
			Default		To make pro	gram cl	hange]		
		CO(s)	all CO's	1		2	↓ _	3			
		Tone (DTMF) mode	e ×				-		4		
		Pulse mode		<u> </u>			<u> </u>				
Switching Mode (Day/Night Service)	[04]	[NEXT] [SELECT] [MEMO									
			Default		To make pro	gram c	hange				
		Manual	×								
		Automatic		<u> </u>							
Starting Time	[05]	[NEXT] [A] [\$] [B] [\$] [S	SELECT] [MEMOR'	Y] [NEXT]][C][<}][D]	[\$][<u>\$</u>	ELEC	<u>CT]</u> [ME	MORY] [END]		
(Day/Night Service)		minut	e AM/PM					AN			
		: starting time	for day service (hou	ur)	stari	ing tin	ne for	night se	rvice (hour)		
			Default		To make pr	gram c	hange				
		Day plan	9:00 AM	<u> </u>					I		
		Day plan Night plan	9:00 AM 5:00 PM								
Flexible Day Outward	[06]	Night plan [NEXT] [NEXT] [CE] [N	5:00 PM MEMORY] [END]								
Flexible Day Outward Dialing Assignment	[06]	Night plan [NEXT] [NEXT] [CE] [N	5:00 PM MEMORY] [END] CO number	sion numi	her annears						
	[06]	Night plan [NEXT] [NEXT] [CE] [N	5:00 PM MEMORY] [END] CO number will the desired extension	sion numi		OPER C	hanae				
	[06]	Night plan [NEXT] [NEXT] [CE] [NEXT] [NE	5:00 PM MEMORY] [END] CO number at the desired exten. Default		To make pr	$\overline{}$			8		
	[06]	Night plan [NEXT] [NEXT] [CE] [NEXT] [NE	5:00 PM MEMORY] [END] CO number will the desired extension	sion numb	To make pr	ogram o	change	17 1	8		
	[06]	Night plan [NEXT] [NEXT] [CE] [NEXT] [NE	5:00 PM MEMORY] [END] CO number til the desired exten. Default all extensions		To make pr	$\overline{}$			8		
	[06]	Night plan [NEXT] [NEXT] [CE] [NEXT] [NEXT] [CE] [NEXT] [CE] [NEXT] [CE] [NEXT] [CE] [NEXT] [CE] [NEXT] [CE] [NEXT] [CE] [NEXT] [CE] [NEXT] [NE	5:00 PM MEMORY] [END] CO number till the desired exten. Default all extensions ×		To make pr	$\overline{}$			8		
	[06]	Night plan [NEXT] [NEXT] [CE] [N	5:00 PM MEMORY] [END] CO number till the desired exten. Default all extensions X X MEMORY] [END]		To make pr	$\overline{}$			8		
Dialing Assignment Flexible Night Outward		Night plan [NEXT] [NEXT] [CE] [NEXT] [NEXT] [CE] [NEXT] [C.	5:00 PM MEMORY] [END] CO number til the desired exten. Default all extensions × ×	11 12	To make pr 2 13 14	$\overline{}$			8		
Dialing Assignment Flexible Night Outward		Night plan [NEXT] [NEXT] [CE] [NEXT] [NEXT] [CE] [NEXT] [C.	5:00 PM MEMORY] [END] CO number till the desired extensions X X X MEMORY] [END] CO number the desired extension	11 12	To make pr 2 13 14	ogram o	16	17 1			
Dialing Assignment Flexible Night Outward		Night plan [NEXT] [NEXT] [CE] [N	5:00 PM MEMORY] [END] CO number til the desired extensions X X MEMORY] [END] CO number the desired extensions Default all extensions	11 12	To make pr 2 13 14	ogram o	16	17 1	8		
Dialing Assignment Flexible Night Outward		Night plan [NEXT] [NEXT] [CE] [N Extensions CO 1 CO 2 CO 3 [NEXT] [NEXT] [CE] [N	5:00 PM MEMORY] [END] CO number till the desired extensions X X X MEMORY] [END] CO number the desired extension	11 12	To make pr 2 13 14	ogram o	16	17 1			

TO SET	PROGRAM ADDRESS	STEPS REQUIRED TO CHANGE PROGRAM
Flexible Day Ringing Assignment	[80]	[NEXT] [NEXT] [CE] [MEMORY] [END] CO number until the desired extension number appears
		Default To make program change
		Extensions all extensions 11 12 13 14 15 16 17 18
		CO1 x 10 17 10
		CO2 x
		CO3 ×
Flexible Night Ringing Assignment	[99]	[NEXT] [CE] [MEMORY] [END] L
		Default To make program change
		Extensions all extensions 11 12 13 14 15 16 17 18 CO 1 × 11 12 13 14 15 16 17 18
		CO2 ×
		(O3 ×
Toll Restriction—Class Assignment	[10]	[NEXT] [NEXT] [SELECT] [MEMORY] [END]
		CLASS 112/3/4 until the desired extension number appears
		Default To make program change Extensions all extensions 11 12 13 14 15 16 17 18
		Class 1 (all calls) ×
		Class 2 (toli calis, local calis)
		Class 3 (selected area-codes, local
		calls)
		Class 4 (local calls)
Toll Restriction— Area Code Selection	[11]	[NEXT] [NEXT] [C] [MEMORY] [END] - area code with 3 digits until the desired memory location number appears
		Memory location number
		00 01 02 03 04 05 06 07 08 09
		Area code entry
Programmable Operator Call	[12]	[NEXT] [NEXT] [SELECT] [MEMORY] [END] ENABLEIDISABLE until the desired extension number appears Default To make program change
	1	Extensions all extensions 11 12 13 14 15 16 17 18
		Enable ×
		Disable
Host PBX Access Codes Assignment	[13]	[NEXT] [NEXT] [AD] [MEMORY] [END] L up to four outside access codes each with a maximum of 2 digits until the desired CO numbers appears
		CO Outside access codes of the host PBX
		2 3
Automatic Answering (Automatic/Manual) Selection	[14]	[NEXT] [NEXT] [SELECT] [MEMORY] [END] L AUTO ANSWER/MAN ANSWER until the desired extension number appears
		Default To make program change
		Extensions all extensions 11 12 13 14 15 16 17 18 Automatic × Image: Control of the contro
		Automatic × Manual
	<u> </u>	

TO SET	PROGRAM ADDRESS	STEPS RE	EQUIRED	TO C	HAN	VGE I	PRO	OGRA	M
Preferred Line	[15]	[NEXT] [NEXT] [SELEC			3/6/6 3	,			
Assignment			- • • • • (none); desired extension			3			
			Default			e program	chano	0	·
		Extensions	all extensions	11 12		14 15	16	17 18	
		• • • • (none)	×						
		CO1 CO2					 		
		CO3							
Pour annual II Call	[16]	(NEVT) (NEVT) (OEL FOT)	INACNAODYI (ENIC	<u> </u>	1 1		1		·
Programmable Call Waiting	[16]	[NEXT] [NEXT] [SELECT]	··· ENABLE/DIS						
		:	sired extension nu		ars				
			Default			e program	chana		1
		Extensions	all extensions	11 12	13	14 15	16	17 18	
	ľ	Disable	×						
		Enable						<u> </u>	l
Duration Time Count	[17]	[NEXT] [SELECT] [MEMOF							
Start Mode		i INSTAN	TLY/5S AFTER	DIAL/10S					•
		Instantly	Default		To ma	ike progra	m chai	nge	
		5S after dial	×					<u>.</u>	
		10S after dial							
Hookswitch Flash Timing	[18]	[NEXT] [NEXT] [SELECT] [N	MEMORY] [END]						
		30	00 MS/600 MS/90	00 MS					
		└ until the a	lesired CO numbe	er appears					
		CO(a)	Default	·	To make	e program	chang		
		CO(s) 300 msec	all CO's	1		2		3	
		600 msec	×						
		900 msec							:
Disconnect Time	[19]	[NEXT] [NEXT] [SELECT] [
		1	.5 SEC/4.0 SEC						
		until the des	ired CO number	appears					
			Default		o make	program	chan	-]
		CO(s) 1.5 sec	all CO's	1		2	_	3	
		1.5 sec 4.0 sec			-		+		
Calling Party Control	(00)		MENODY (END	<u> </u>				*****	
Calling Party Control (CPC) Signal	[20]	[NEXT] [NEXT] [SELECT]	(MEMORY)[ENL : <i>ENABLE/DISA</i>						
			sired CO number						
	:		Default	• •	To mak	e program	chana		ו
		CO(s)	all CO's	1	10 max	2	Chang	3	1
		Enable	×]
		Disable	l	1			l_		j
Intercom Alerting Mode	[21]	[NEXT] [NEXT] [SELECT] [MEMORY] [END]					
		T	ONE CALL/VO	ICE CAL.					
		└ until the d	esired extension n	iumber app	ears				
			Default	I	To make	e program	chang	e	
		Extensions	all extensions	11 12	13	14 15	16	17 18	
		Tone call Voice call	×	 	+	\dashv	-	+	
Programmable	[22]	<u> </u>	MEMODYLICARD	1			٠		
Programmable Doorphone	[22]	[NEXT] [NEXT] [SELECT] [MEMORY][END PHONE 1, 2/1/2/	'! • • • (den	v the ri	inging)			
•		until the de	sired extension nu	ımber appe	ears	oo/			
			Default	·		e program	chan	ge]
		Extensions	all extensions	11 12	13	14 15	16	17 18	
		Doorphone 1 Doorphone 2	×		\vdash		\vdash	+	
		deny the ringing	,,	†	† †		†	 	
	.	<u></u>					•		

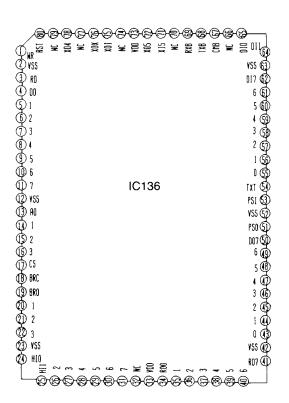
TO SET	PROGRAM ADDRESS	STEPS REQUIRED TO CHANGE PROGRAM	
Dial Call Pickup Group Assignment	[23]	[NEXT] [NEXT] [SELECT] [MEMORY] [END]	
		until the desired extension number appears	
		Default To make program change Extensions all extensions 11 12 13 14 15 16 17 18	
		Pickup Group	
		Pickup Group 2	
		out of the group	
Busy Tone Selection	[24]	[NEXT] [SELECT] [MEMORY] [END] TONE 1/2	
		Default To make program change	
		Tone 1 ×	
		Tone 2	
Hold Time Reminder	[25]	[NEXT] [SELECT] [MEMORY] [END] 1 MIN/2 MIN/9 MIN minutes	
		1 2 3 4 5 6 7 8 9	
		Default ×	
		To make program change	
Hold Recall Time Set	[26]	[NEXT] [SELECT] [MEMORY] [END] 30 SEC/1 MIN/1.5 MIN/2 MIN/DISABLE	
		30 seconds 1 minute 30 seconds 2 minutes disable	
		Default × To make program change	
		To make program change	
Programmable External Paging Access Tone	[27]	[NEXT] [SELECT] [MEMORY] [END]	
		Default To make program change	
		Enable × Disable	
DTMF Receiver Check	[28]	[NEXT] [SELECT] [MEMORY] [END] ENABLE/DISABLE until the desired DTMF receiver appears	
		Default To make program change	
	1	DTMF receiver 1, 2 1 2 Enable ×	
	[Disable X	
Programmable Toll Prefix	[29]	[NEXT] [SELECT] [MEMORY] [END]	
		Default To make program change	
		With 1 ×	
		Without 1	
Programmable secret Auto Dial	[30]	[NEXT] [SELECT] [MEMORY] [END] NO SECRET/ SECRET	
		Default To make program change No secret X	
	ĺ	No secret × Secret	
Station Program Clear	[98]	[NEXT] [MEMORY] [END]	<u> </u>
System Clear	[99]	[NEXT] [MEMORY] [END]	

IC I/O DATA

	IC1	00	_
1	vss	Е	64
	XTAL	RD	ı
3	EXTAL	WR	62
4		R/W	
5		LIR	
-6		ВА	59
7	STBY	D0	58
8		D1	57
9	P20	D2	56
10		D3	55
11	P22	D4	54
12	P23	D5	53
13	l	D6	52
14	P25	D7	51
15	P26	A0	50
16	P27	A1	49
17	P50	A2	
18	P51	A3	
19	P52	A4	
20	P53	A 5	45
21	P54	A6	44
22	P55	A 7	43
23	P56	VSS	42
24	P57	A8	41
25	P60		40
26	P61		39
27	P62	A11	38
28	P63		37
29	P64		36
30	P65	A14	
31	P66		34
32	P67	Vcc	33

IC100

Port	Pin No.	1/0	Signal Name	High Imp.	High Level	Low Level	Remarks
NMI	8	I	CPU Restart				Horriarks
P20	9	I	CNCT1: Doorphone 1 Connect Detection		Connect	Non-Connect	
P21	10	I	CNCT2: Doorphone 2 Connect Detection		Connect	Non-Connect	
P22	11		DHK1: Doorphone 1 Connect Detection		Off-Hook	On-Hook	
P23	12		DHK2: Doorphone 2 Connect Detection		Off-Hook	On-Hook	
P26	15		DROP: Doorphone Adaptor Connect Detection		Non-Connect	Connect	
P51	18		PFD: Power Failure Detection		Power Failure	Normal	
P53	20		HALT: Halt Control Input		Normal	Power Failure	
P54	21		TEST1		Normal	Test Mode	
P55	22		TEST2		Normal	Test Mode	
P56	23		STD1: DTMF Signal Detection 1		Reception	Non-Reception	DTMF R1
P57	24		STD2: DTMF Signal Detection 2		Reception	Non-Reception	DTMF R2
P63	28	0	20Hz: Ringing Signal Output				DIWII TIZ
P64	29	0	PF: Power Failure Control		Power Failure	Normal	
P65	30	0	20Hz: Ringing Signal Output			*****	
P66	31	0	BRK: EXT Over Current Protection	Break	On	Break	EXT11-18



IC136

Port	Pin No.	1/0	Signal Name	High Imp.	High Level	Low Level	Remarks
НЮ	24	ı	HK11: EXT Telephone Hook Detection		On-Hook	Off-Hook	Pullup by 2.2kΩ
HI1	25	ı	HK12: EXT Telephone Hook Detection		On-Hook	Off-Hook	Pullup by 2.2kΩ
HI2	26	ı	HK13: EXT Telephone Hook Detection		On-Hook	Off-Hook	Pullup by 2.2kΩ
HI3	27	ı	HK14: EXT Telephone Hook Detection		On-Hook	Off-Hook	Pullup by 2.2kΩ
HI4	28	ı	HK15: EXT Telephone Hook Detection		On-Hook	Off-Hook	Pullup by 2.2kΩ
HI5	29	I	HK16: EXT Telephone Hook Detection		On-Hook	Off-Hook	Pullup by 2.2kΩ
HI6	30	ı	HK17: EXT Telephone Hook Detection		On-Hook	Off-Hook	Pullup by 2.2kΩ
HI7	31	ı	HK18: EXT Telephone Hook Detection		On-Hook	Off-Hook	Pullup by 2.2kΩ
RO0	34	0	RG11: Extension Ring Relay Control	Bell Tra	nsmission	Non-Bell Transr	mission
RO1	35	0	RG12: Extension Ring Relay Control	Bell Tra	ansmission	Non-Bell Transr	mission
RO2	36	0	RG13: Extension Ring Relay Control	Bell Tra	nsmission	Non-Bell Transr	mission
RO3	37	0	RG14: Extension Ring Relay Control	Bell Tra	nsmission	Non-Bell Transr	nission
RO4	38	0	RG15: Extension Ring Relay Control	Bell Transmission		Non-Bell Transmission	
RO5	39	0	RG16: Extension Ring Relay Control	Bell Transmission		Non-Bell Transmission	
RO6	40	0	RG17: Extension Ring Relay Control	Bell Transmission		Non-Bell Transmission	
RO7	41	0	RG18: Extension Ring Relay Control	Bell Transmission		Non-Bell Transr	mission
DOO	43	0	TXD11: EMSS TEL. Data Transmission	Non-Tr	ansmission	Transmission	
DO1	44	0	TXD12: EMSS TEL. Data Transmission	Non-Tr	ansmission	Transmission	
DO2	45	0	TXD13: EMSS TEL. Data Transmission	Non-Tr	ansmission	Transmission	
DO3	46	0	TXD14: EMSS TEL. Data Transmission	Non-Transmission		Transmission	
DO4	47	0	TXD15: EMSS TEL. Data Transmission	Non-Transmission		Transmission	
DO5	48	0	TXD16: EMSS TEL. Data Transmission	Non-Transmission		Transmission	
DO6	49	0	TXD17: EMSS TEL. Data Transmission	Non-Transmission		Transmission	
DO7	50	0	TXD18: EMSS TEL. Data Transmission	Non-Tr	ansmission	Transmission	
DIO	55	I	RXD11: EMSS TEL Reception Data		Non-Data	Data	Pullup by 2.2kΩ
DI1	56	1	RXD12: EMSS TEL Reception Data		Non-Data	Data	Pullup by 2.2kΩ
DI2	57	1	RXD13: EMSS TEL Reception Data		Non-Data	Data	Pullup by 2.2kΩ
DI3	58		RXD14: EMSS TEL Reception Data		Non-Data	Data	Pullup by 2.2kΩ
DI4	59		RXD15: EMSS TEL Reception Data		Non-Data	Data	Pullup by 2.2kΩ
DI5	60	ı	RXD16: EMSS TEL Reception Data		Non-Data	Data	Pullup by 2.2kΩ
DI6	61	- 1	RXD17: EMSS TEL Reception Data		Non-Data	Data	Pullup by 2.2kΩ
DI7	62		RXD18: EMSS TEL Reception Data		Non-Data	Data	Pullup by 2.2kΩ

	I (0113	
33 73		P60 P61	31
2 3 12 22 23 42 43 52 63	VSS NC VSS VSS NC VSS NC VSS NC VSS	P10 P11 P12 P13 P14 P15 P16 P20 P21 P22 P23	13 14 15 16 17 18 19 21 24 25 26
57 58 59 60 61 64	P51 P52 P53 P54 P55 P56 P57	P00 P01 P02 P03 P04 P05	4 5 6 7 8 9
48 49 50 51 53	P41 P42 P43 P44 P45 P46 P47	P06 A0 A1 A2 A3 RD	77 78 79 80 66
36 37 38 39 40 41 45 55 46	P30 P31 P32 P33 P34 P35 P37 P50 P40	D1 D2 D3 D4 D5 D6 D7 RST	67 68 69 70 71 72 74 75 76

IC113

Port	Pin No.	1/0	Signal Name	High Imp.	High Level	Low Level	Remarks
PO0	4	0	COL1: HD Signal Generator Control 1		Active	In-Active	
PO1	5	0	COL2: HD Signal Generator Control 2		Active	In-Active	
PO2	6	0	COL3: HD Signal Generator Control 3		Active	In-Active	
PO3	7	0	ROW1: HD Signal Generator Row 1		Active	In-Active	
PO4	8	ō	ROW2: HD Signal Generator Row 2		Active	In-Active	
PO5	9	0	ROW3: HD Signal Generator Row 3		Active	In-Active	
PO6	10	0	ROW4: HD Signal Generator Row 4		Active	In-Active	
P10	13	0	A: Cross Point Address		Address High	Address Low	
P11	14	0	B: Cross Point Address		Address High	Address Low	
P12	15	0	C: Cross Point Address		Address High	Address Low	
P13	16	0	D: Cross Point Address		Address High	Address Low	
P14	17	0	E: Cross Point Address		Address High	Address Low	
P15	18	0	STB0: Cross Point Strobe		Active	In-Active	
P16	19	0	STB1: Cross Point Strobe		Active	In-Active	
P20	21	0	XD0: Cross Point Data		Data High	Data Low	
P21	24	0	XD1: Cross Point Data		Data High	Data Low	
P22	25	0	XD2: Cross Point Data		Data High	Data Low	
P23	26	0	XD3: Cross Point Data		Data High	Data Low	
P60	31	Ī	OL: EXT Over Current Detection		Over Current	Normal	EXT11-18
P61	32	i	PRG: System Selection		System Mode	Program Mode	
P30	36	0	PDRLY: Power Failure Control	Break	Make	Break	RLY10A-10C
P31	37	0	DL3: Line Close, Dial Transmission	Break	Make	Break	CO3
P32	38	0	CF3: CO Amp Conference	Conference	Non-Conference	Conference	CO3
P33	39	0	HD3: CO Amp Hold on Music Control	Transmission	Non-Transmission	Transmission	CO3
P34	40	0	SH3: CO Amp Shunt Control	Shunt	Non-Shunt	Shunt	CO3
P35	41	0	MT3: CO Amp Mute Control	Non-Mute	Mute	Non-Mute	CO3
P37	45	1	BELL3: Bell, CPC Input		Non-Bell,Line Break	Bell. Line Make	CO3
P40	46	0	DAY: Day Mode LED Control	Lights-Out	Lighting	Lights-Out	
P41	47	0	DL2: Line Close, Dial Transmission	Break	Make	Break	CO2
P42	48	0	CF2: CO Amp Conference	Conference	Non-Conference	Conference	CO2
P43	49	0	HD2: CO Amp Hold on Music Control	Transmission	 	Transmission	CO2
P44	50	0	SH2: CO Amp Shunt Control	Shunt	Non-Shunt	Shunt	CO2
P45	51	0	MT2: CO Amp Mute Control	Non-Mute	Mute	Non-Mute	CO2
P46	53	0	BUSY2: Doorphone 2 ON/Off Control	Off	On	Off	
P47	54	ı	BELL2: Bell, CPC Input		Non-Bell,Line Break	Bell, Line Make	CO2
P50	55	0	NIGHT: Night Mode LED Control	Lights-Out	Lighting	Lights-Out	
P51	56	0	DL1: Line Close, Dial Transmission	Break	Make	Break	CO1
P52	57	0	CF1: CO Amp Conference	Conference	Non-Conference	Conference	CO1
P53	58	0	HD1: CO Amp Hold on Music Control	Transmission	Non-Transmission	Transmission	CO1
P54	59	0	SH1: CO Amp Shunt Control	Shunt	Non-Shunt	Shunt	CO1
P55	60	0	MT1: CO Amp Mute Control	Non-Mute	Mute	Non-Mute	CO1
P56	61	0	BUSY1: Doorphone 1 ON/Off Control	Off	On	Off	
P57	62		BELL1: Bell, CPC Input		Non-Bell,Line Break	Bell, Line Make	CO1

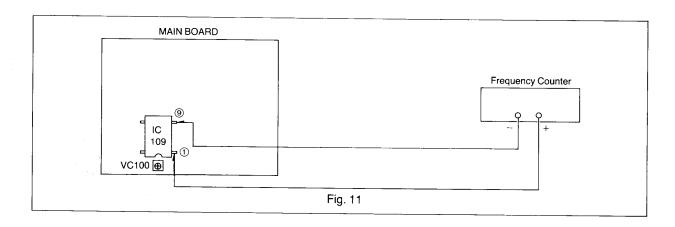
ADJUSTMENTS

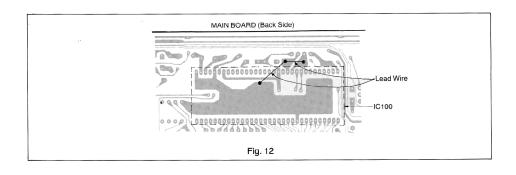
■ OSCILLATION PERIOD ADJUSTMENT

Perform the following adjustment after replacing IC109.

- 1. Connect the AC cord to the AC power source.
- 2. Set the power switch to ON.
- 3. Connect the lead wire. (See Fig. 12) (After adjustment, remove the lead wire.)
- 4. Push the reset switch.
- 5. Connect the frequency counter. (See Fig. 11)
- 6. Set the frequency counter to PERIOD.
- 7. Adjust VC100 for a reading of (,) msec on the frequency counter.

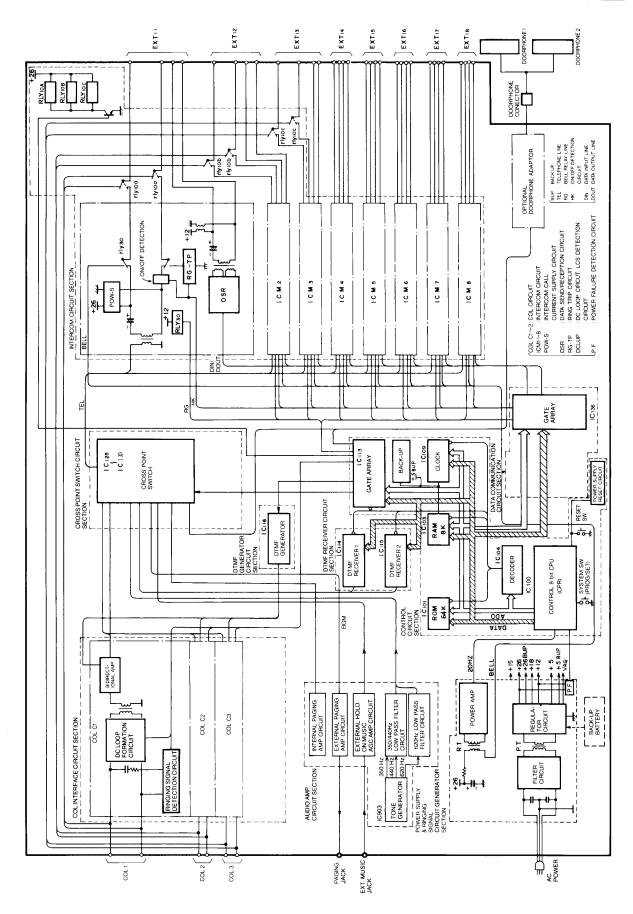
Room temperature for adjusting (°C)	Period value (msec)	Room temperature for adjusting (°C)	Period value (msec)
14~14.9	15.624943 (±0.00001)	20~20.9	15.624880 (±0.00001)
15~15.9	15.624933 (±0.00001)	21~21.9	15.624876 (±0.00001)
16~16.9	15.624922 (±0.00001)	22~27.9	15.624870 (±0.00001)
17~17.9	15.624910 (±0.00001)	28~28.9	15.624876 (±0.00001)
18~18.9	15.624899 (±0.00001)	29~29.9	15.624880 (±0.00001)
19~19.9	15.624888 (±0.00001)		



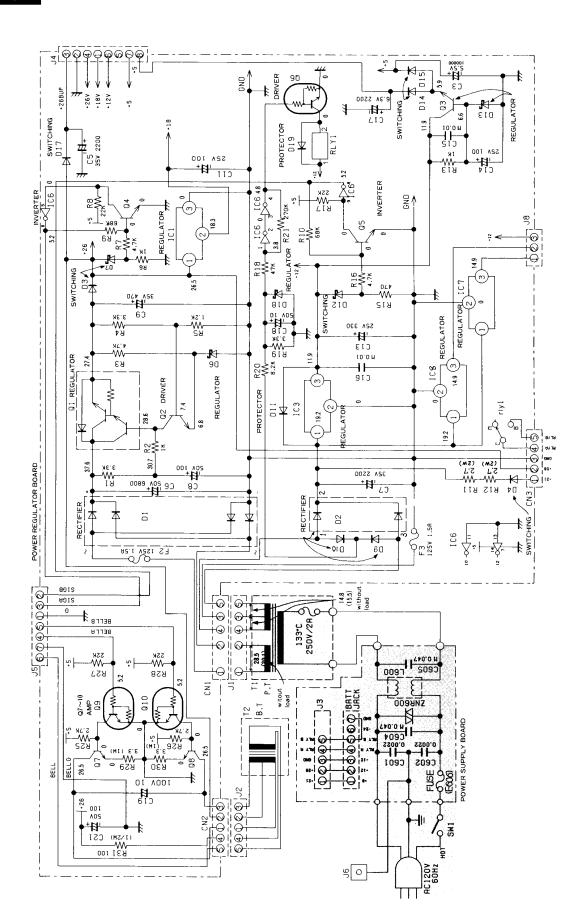


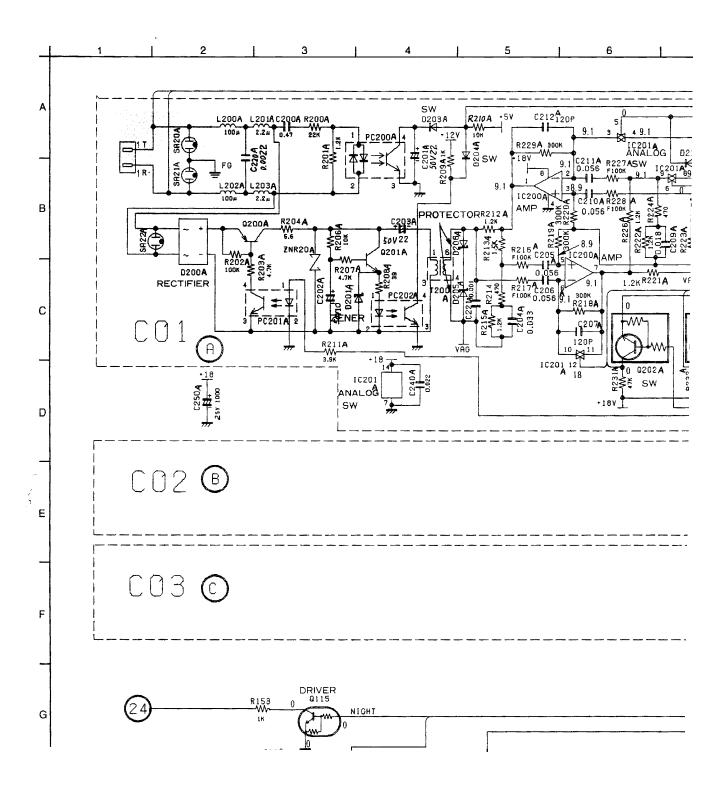
BLOCK DIAGRAM

V



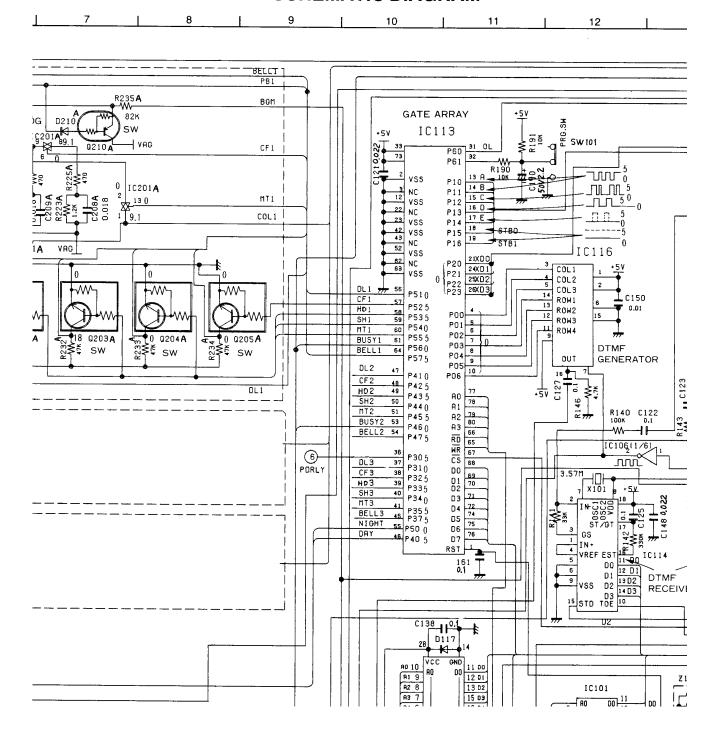








SCHEMATIC DIAGRAM





EXT1 EXT2 EXT3 EXT4 13 14 1 14 22 R500 5 9 1 R501 W 22 VDD C500 VSS 110 0.022 -9.1 1 21 20 19 1 DTMF.G1 20 19 1 T,R 777 1.15K ₁₂ COL 1 COL2 1.15K 2 010130 4 COL3 17 1.15K 17 STBO x09 Vcc 3 18 EXT VCC 3 A B C D E 9 8 5 6 7 STBO x00 +50 10 18v +18V **(3**0) R522 1.15K W R523_1.15K 13 16 14 15 22 C501 0.022 OL +26V PROTECTOR∠ DR2 2) A B C D E 9 8 5 6 7 VAG •18V DTMF.R2 vcc 9 5V 10 +51 R503 R508 R509 R510 W. +<u>18</u>V C502 C130 0.001 VAG R511 R511 R512 C512 0.027 R512 C513 0.027 ;0 IC125~IC130 2120 LS 1 _____ R151 33K CROSS POINT SWITCH 9.1 R152 22K 9 1 12 2 TOR ₹, 10 9.1 9 1143 C123 IC118(1/2) C504 VAGINT.P VAG * C122 VAG DATA 11 TONE : /61 TONE 2 20 BGM 19 19 CS C135 0.022 330K C125 | ... 5۷ **PROTECTOR** R144 IN-55 53/00 +51 B20HZ GS ST/GT R110 W 150 58 00 V3
R111 W 150 56
R112 W 150 56
R113 W 150 56 9 P65 30 20HZ 30 P66 31 BRK 9L 2 C112 15P 3 X100 VREF EST 1C114 XTAI nπ 01 1205 (31) DTMF IC115 D2 19 D6 EXTAL VAG BRK RECEIVER vss D3 14 D7 TOE MPO 15 STD MP1 23 STD1 24 STD2 47kW 63 63 62 C NR P57 <u>+ 5V</u> R133 47K STBY D 50 A0 19 7100

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18

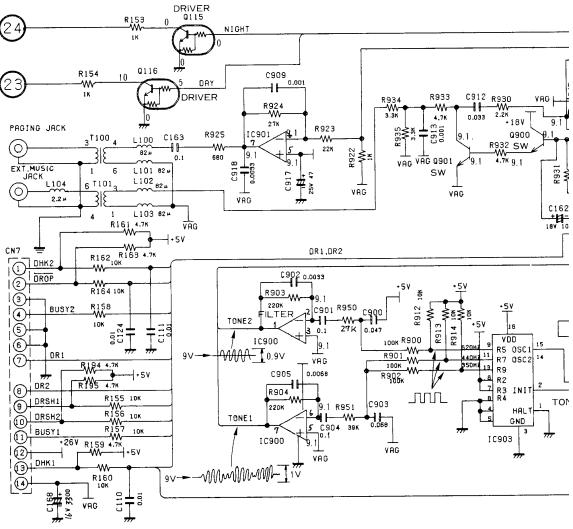
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Notes:

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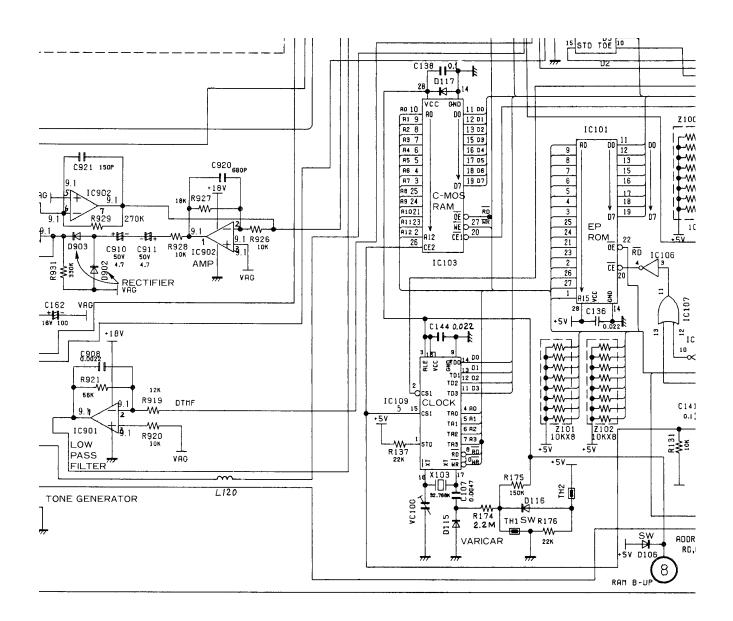
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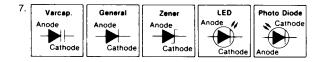
- 1. SW1: Power switch.
- 2. SW100: Reset switch.
- 3. SW101: System program switch in "PROGRAM" position.
- DC voltage measurements are taken with electronic voltmeter and oscilloscope from ground line.
 - Power Switch ON condition
 - Voltage Value: V
- This schematic diagram may be modified at any time with the development of new technology.

Important safety notice

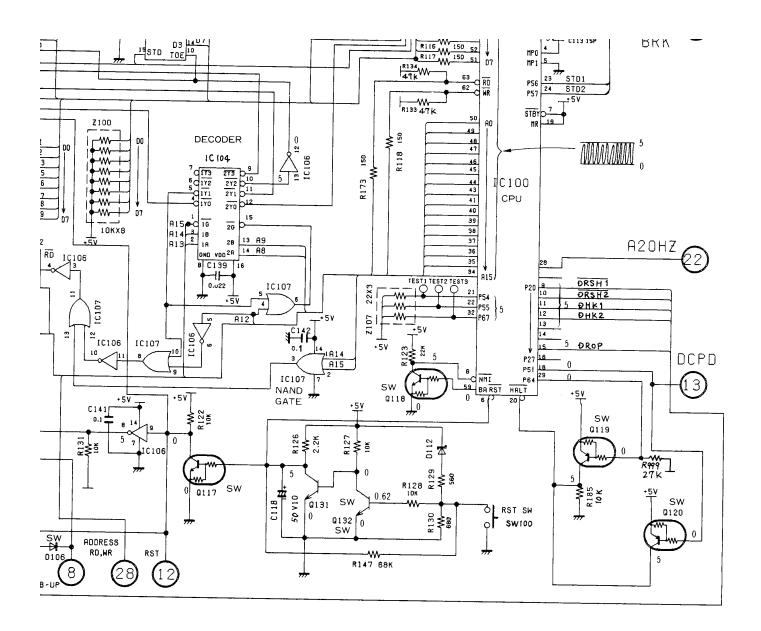
The shaded area on this schematic diagram incorporates special features important for protection from fire and electrical shock hazards. When servicing it is essential that only manufacturer's specified parts be used for the critical components in the shaded areas of the schematic.



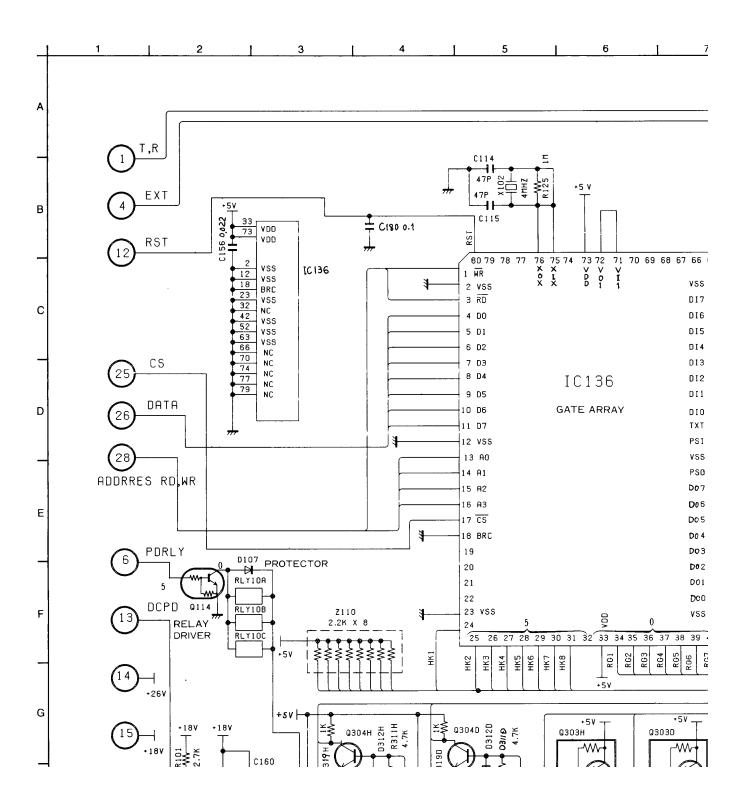








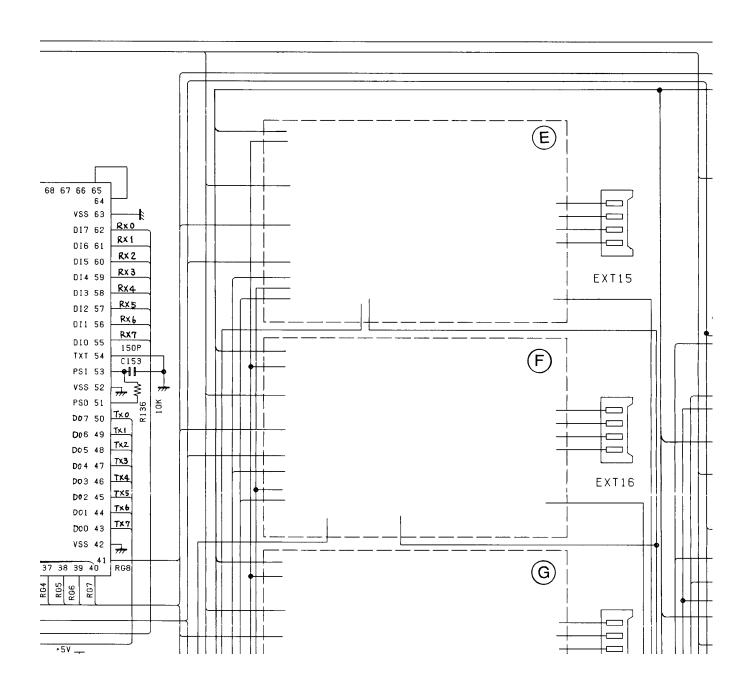






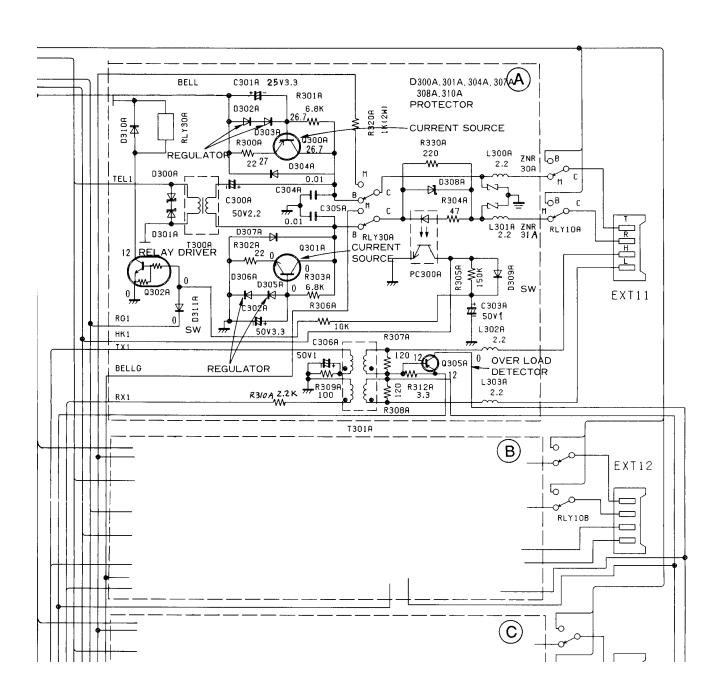
SCHEMATIC DIAGRAM

7 | 8 | 9 | 10 | 11 | 12 | 13

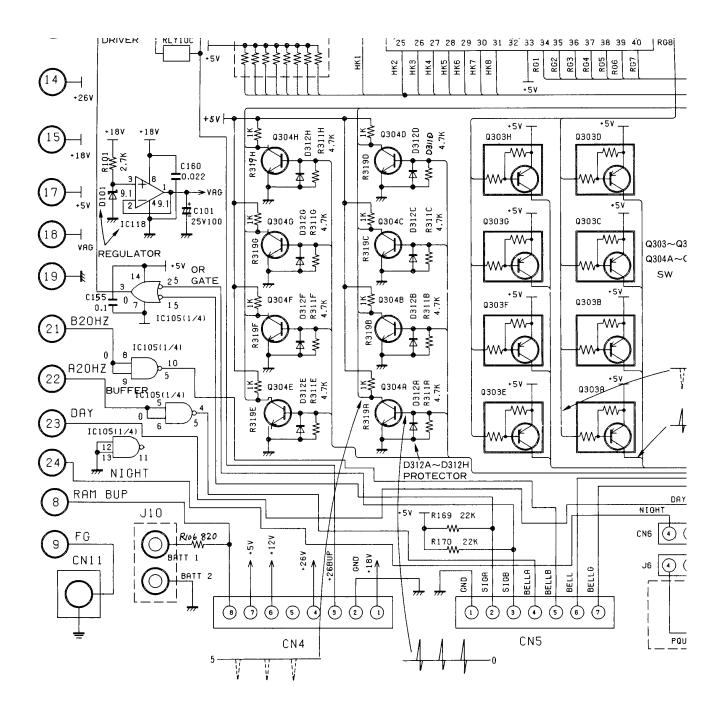




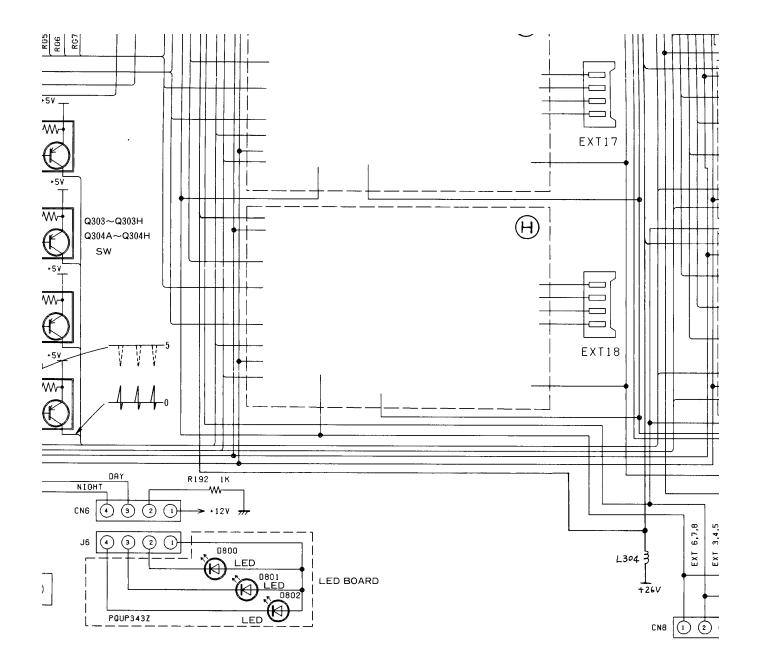
13 | 14 | 15 | 16 | 17 | 18 | 19



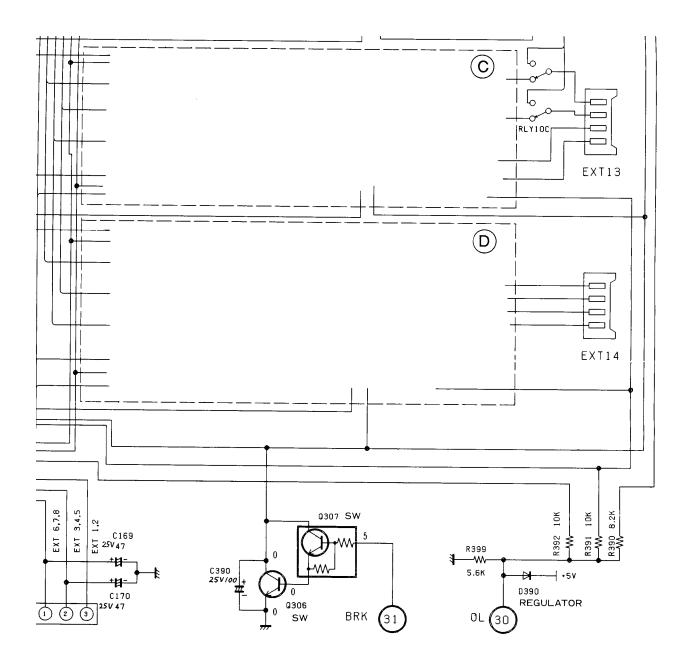






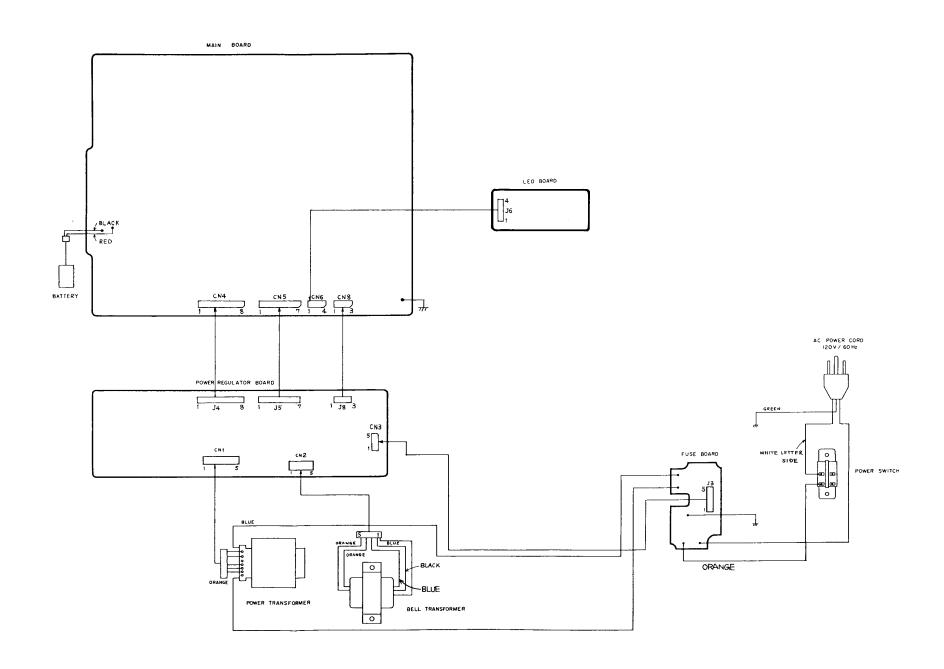




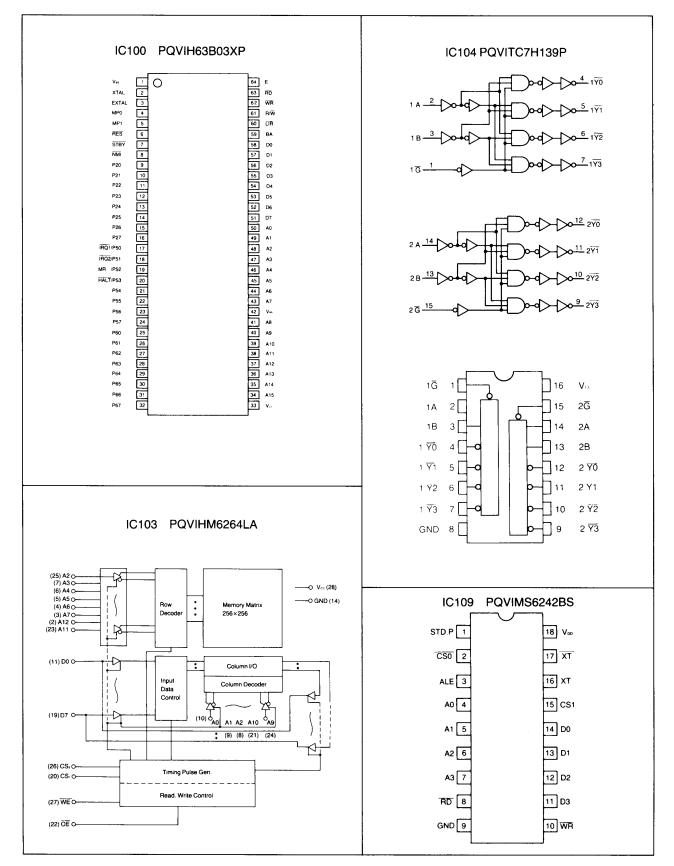


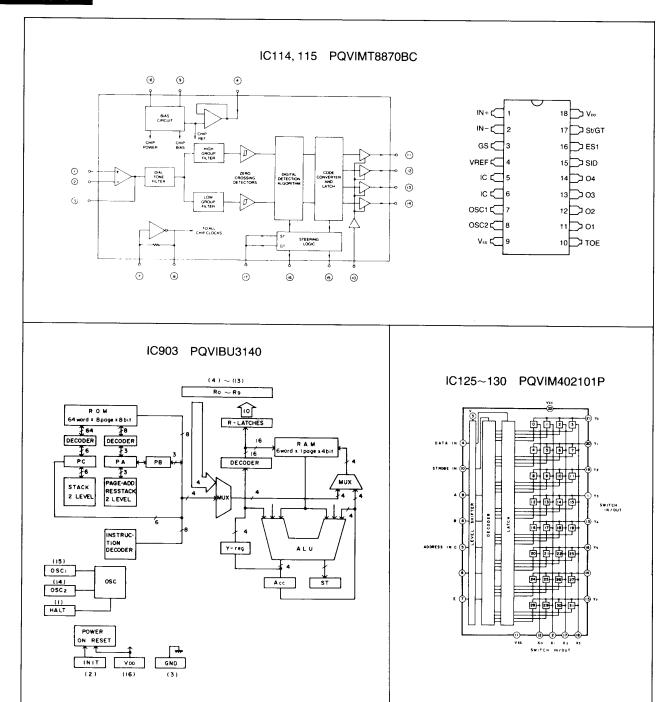


WIRING CONNECTION DIAGRAM



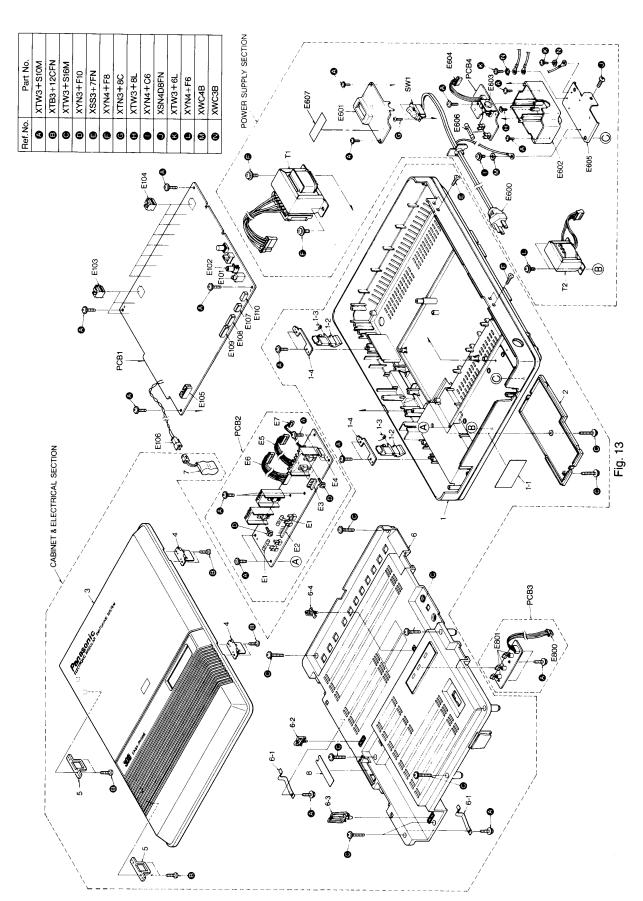
IC BLOCK DIAGRAM





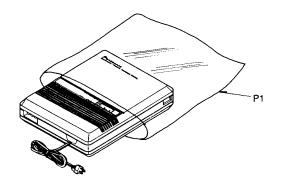
TERMINAL GUIDE OF IC'S, TRANSISTORS AND DIODES

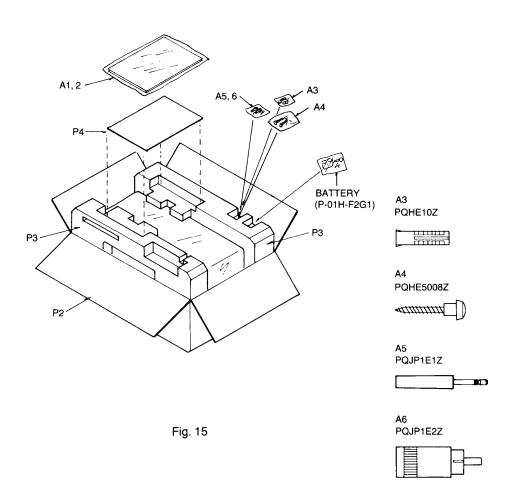
1 _{3 2} AN78L18	AN78M12F	PQVINJM4011BC PQVIPD4066UC	PQVIH63B03XP	12 12 11 11 PQVIM402101P
28 15 14 PQVIHM6264LA PQWIT30810M2	9 9 8 PQVITC7H139P	64 41 40 64 25 65 80 1 24 PQVI671152F PQVI672191F	PQVINJM4558D	10 18 18 19 19 19 19 19
18 10 10 10 10 10 10 10 10 10 10 10 10 10	9 16 1 PQVITP5089N	9 16 1 PQVIBU3140	14 1 1 8	PQVITC7H32P
8 ************************************	PQVIPD4066BC	2SD1275 2SD1406	E C B 2SB644 2SD637 2SD639	E C B
E C B 2SC2235	E C B 2SC2878	E C B 2SA1626	PQVD2B4B41	DTA124XA DTA143A DTC143XA DTC144A 2SA937 2SC2021 PQVTDTC114Y
Anode Cathode Anode PQVDMI151	Cathode	1SS131 1SV124 1SR35-200 MA4030 PQVDHZS2B1	Anode	MA4039 MA4047 MA4051 MA4062 MA4091 PQVDHZ7A2
Anode Cathode MA4200	Anode Cathode LN220RPH LN320GPH LN420YPH			



EXPLODED VIEW

ACCESSORIES & PACKING MATERIALS





	REP	ACEME	VT P	ARTS LI	ŠŤ		
Notes:					Mod	del KX-T	30810-1
Printed circuit board assembly with mark (NLA) is no longer							
available afte	er production dis	continuati	on of	the com	plete set	:.	
Important sa	fety notice.						
Components for safety.	identified by the	n <u>∱</u> mark s	speci	al charac	teristics	importan	t
When replac	ing any of these	compone	ents,	use only	manufac	turer's s	pecified
The S mark i parts.	ndicates service	standard	part	s and ma	ay differ f	rom proc	duction
	& CAPACITOR:	_					
	wise specified.	5					
		L 10000 \$	1 100	Wko.			
	ire in ohms(Ω) are in MICRO F						
	age of Resistor	AHADS(μг)	= 0.001	μ-		
Type avvau	age of Hesistor						
ERC:Solid	I ERX:Metal	Eilm	יספו	RD:Carbo			
ERD:Carbon		Oxide PQRQ:Fuse					
PQ4R:Chip	ERO:Metal		ERF:Wire Wound				
Wattage		1 11111	LNI	.vviie vv	ouna		
	W 14,25,S2:1/	4W 112	50.5	1.1/2\\	1:1W	2:2W	1 5:5W
	ige of Capacitor	112	,50,5	1.1/200	1.144	2.244	3.344
Type	ige of outpaction						
ECFD:Semi-C	Conductor	IECCD I	CKL	D,PQCBC	· Corar	nic	
ECQS:Styrol				•	,	CQB : P	olyoctor
POCBX.ECU	V-Chin				,		uiyestei
ECMS:Mica			ECEA,ECSZ,ECOS : Electrolytic ECQP : Polyproplylene				
Voltage		12301 .	. 5.9	p. oplyler			
ECQ Type	ECOG	ECSZ 1	voe			thers	
1	ECQV Type	'	,,,,,		O		
1H: 50V	05: 50V	OF:3.1	5V	QJ .6.	3V	1V :3	5V
2A:100V	1:100V	1A:10V	,	1A :10	V	50,1H:	50V
2E:250V	2:200V	1V:35V	,	1C :16		1J :6:	
ZL.2304				1E,25:2			

Ref. No.	Part No.	Part Name & Description	Pcs
11011110	Tarrito.	r ait Name a Description	PCS
	CARIN	ET & ELECTRICAL PARTS	<u>L.</u> .
	0 7 (5)	ET & ELEGITIONE FAITIS	
1	PQYMT30810M1	Rear Cabinet Assembly	1 1
1-1	PQGT373Z	Name Plate	1
1-2	PQHR9120Z8	Hook	2
1-3	PQUS91Z	Spring, Hook	2
1-4	PQUL51Z	Bracket, Hook	2
2	PQKE31Z8	Cabinet Door	1
3	PQYF1T30810M	Front Cabinet Assembly	1
4	PQBH2Z	Hinge-A	2
5	PQHR9121Z8	Hinge-B	2
6	PQYF230810M1	Inside Cover Assembly	1
6-1	PQUS102Z	Leaf Spring	2
6-2	PQHR118Z	Cord Holder-A	1
6-3	PQHR119Z	Cord Holder-B	1 1
6-4	PQHR120Z	Cord Holder-C	1
7	P-01H-F2G1	Battery	1
8	PQUV50Z	Battery Cover	1 1
	ACCESSORIES	AND PACKING MATERIALS	•
A1	PQQX5289Z	Installation Manual	г 1
A2	PQQX5291Z	User Guide	1 1
A3	PQHE10Z	Mounting Bracket (Curl Plug)	3
A4	PQHE5008Z	Mounting Bracket (Screw)	3
A5	POJP1E1Z	Plug-A	1
A6	POJP1E2Z	Plug-B	1
7.0	T GOT TEZZ	riug-a	'
P1	XZB45X06A05	Protection Cover	1 1
P2	PQPK392Y	Packing Case	1
P3	PQPN9036Z	Cushion Complete (L,R Side)	1
P4	PQPN668Z	Cushion	1
			

Ref. No.	Part No.	Part Name & Description	Pcs
-	MAIN	BOARD PARTS	<u> </u>
PCB1	PQWP130810M1	Main P.C. Board Ass'y (NLA)	1 1
. 00.	1 4441 150010141	I Wall 1 .O. Board Assy (NDA)	'
		(ICs)	
IC100	PQVIH63B03XP	IC IC	1 1
IC101	PQWIT30810M2	IC	1
IC102	Not Used		
IC103 IC104	PQVIHM6264LA PQVITC7H139P	IC S	1
IC104	PQVIPD4011BC	IC S	1 1
IC106	PQVITC7H04P	ic s	
IC107	PQVITC7H32P	ic s	1 ;
IC108	Not Used	ļ	
IC109	PQVIMS6242BS	IC	1
IC110-112	Not Used		
IC113	PQVI672191F	IC	1
IC114,115	PQVIMT8870BC	IC s	2
IC116	PQVITP5089N	IC .	1
IC117	Not Used		-
IC118	PQVINJM4558D	IC s	1
IC119-124	Not Used		1
IC125-130	PQVIM402101P	IC	6
IC131-135	Not Used	l.,	
IC136	PQVI671152F	IC .	1
,200C	PQVINJM4558D	IC s	3
1 '	PQVIPD4066BC	lic s	1 .
,201C	PQVIPD4066BC	IC s	3
IC900,901	PQVINJM4558D	lic s	3
.902	FGV IIVOIVI4336D	100	1 3
IC903	PQVIBU3140	lic	1
	1 223,70	·-	1 '
1			
1		(TRANSISTORS)	
Q114,115	DTC143XA	Transistor (Si)	3
,116			
Q117,118	DTC144A	Transistor (Si) S	2
Q119,120	DTA143A	Transistor (Si) S	2
Q131,132	2SC2021	Transistor (Si)	2
Q200A,200B	2SA1626	Transistor (Si)	3
,200C			
Q201A,201B	2SC2235	Transistor (Si)	3
,201C	DTC144A	Transista (Ci)	1
Q202A,202B	DTC144A	Transistor (Si) S	12
,202C,203A ,203B,203C			1
,204A,204B ,204C,205A			
,204C,205A			1
Q210A,210B	DTA124XA	Transistor (Si)	3
,210C	DIAILANA	Transision (Si)	ľ
Q300A-	2SB644	Transistor (Si)	8
300H			
Q301A-	2SD639	Transistor (Si)	8
301H			
Q302A-	PQVTDTC114Y	Transistor (Si)	8
302H			
Q303A-	DTA143A	Transistor (Si) S	8
303H			
Q304A-	2SC2021	Transistor (Si)	8
304H			
Q305A-	2SA937	Transistor (Si)	. 8
305H			1
Q306	2SD1406	Transistor (Si)	1
	DTC144A	Transistor (Si) S	1
Q307			
C1900	2SC2021	Transistor (Si)	1 1
	2SC2021 2SC2878	Transistor (Si) Transistor (Si)	1 1
Q900			

Ref. No.	Part No.	Part Name & Description	Pcs	Ref. No.	Part No.	Part Name & Description		Pcs
Dia	141 4004	(DIODES)				(COILS)		
D101	MA4091	Diode (Si)	1 1	L100-103	ELEPK820KA	Choke Coil	s	4
D102-105	Not Used			L104	PQLQZM2R2M	Choke Coil	s	1
D106-109	1SS131	Diode (Si)	4	L105-109	Not Used			
D110	Not Used			L110,111	PQLQZM2R2M	Choke Coil	s	35
D111	1SS131	Diode (Si)	1	,120				
D112	MA4039	Diode (Si)	1 1	,300B-300H				
D113,114	Not Used			,301A-301H	ļ			
D115	1SV124	Diode (Si)	1 1	,302A-302H		1		
D116,117	1SS131	Diode (Si)	2	.303A-303H				
	PQVDS1YB40F1	D:- 4- (0)		L200A,200B	PQLQZK101K	Choke Coil	Δ	6
,200C		Diode (Si)	7 9	,200C,202A	I GEGZKIOIK	Choke Coll	Δ	U
	PQVDHZS2B1	Diode (Si)	\	,202B,202C				
,201C	T GVO! IZOZDI	Diode (Si)	² ° 1		PQLQZK2R2K	Choke Coil	. A	6
D202A-202C	Not Head			L201A,201B	PULUZNZNZN	Choke Coll	⚠	ь
		Diede (C)		,201C,203A				
D203A,203B	133131	Diode (Si)	6	,203B,203C		1		
,203C,204A			-	L304	ELEA100KA	Choke Coil		1
,204B,204C		ł	l l					
D205A,205B	MA4047	Diode (Si)	6			(TRANSFORMERS)		
,205C,206A		1		T100,101	PQLT2D6B	Interface Transformer		2
,206B,206C				T200A,200B	ETA14Y85AY	Interface Transformer	Æ	11
D207A-209C	Not Used			,200C				
D210A,210B	1SS131	Diode (Si)	3	,300A-300H				
,210C				T301A-301H	ETE13K38AY	Pulse Transformer		8
D300A-300H	MA4047	Diode (Si)	16					
,301A-301H		(=,						
D302A-302H		Diode (Si)	48			(SWITCHES)		
.303A-303H		2.000 (0.1)	"	SW100	PQSH1A12Z	Switch, Reset		1
,304A-304H				SW101	PQSS2A20Z	· ·		1
,305A-305H			i i	34101	FQ33ZAZUZ	Switch, System Program		'
,306A-306H			l					
					ļ			
,307A-307H		- · · · · · ·				(RELAYS)		
D308A-308H	h e	Diode (Si)	8	RLY10A,10B	PQSL49Z	Relay		3
D309A-309H	1SS131	Diode (Si)	32	,10C		1		
,310A-310H				RLY30A-	PQSL41Z	Relay		8
,311A-311H				30H		İ		
,312A-312H	1							
D390	1SS131	Diode (Si)	1					
D902,903	1SS131	Diode (Si)	2			(VARIABLE CAPACITOR)		
				VC100	PQCVTZB30B	Trimmer		1
	İ	l		<u> </u>				
i l		(VARISTORS)	1			1		
ZNR20A,20B	ERZC07DK820	Varistor	<u>А</u> . В з		1	(THERMISTORS)		
,20C	ľ	i ·	_	TH1	PORRTS104U	Thermistor		1
ZNR30A-	ERZC03DK241	Varistor	16	TH2	PQRRTS203U	Thermistor		1
30H			'	'''-	1 4111102000	THE HIMSTON		'
,31A-31H		1						
SA20A.20B	PQVDSAE310F1	Suran Abandan				(DI IOTO EL FOTIO TRANSDI	10550	
	FUVDSAESTOFT	Surge Absorber	<u>∱</u> 9			(PHOTO ELECTIC TRANSDU		
,20C,21A	ł	ľ	1	PC200A	PQVITLP520	Photo Coupler	Δ	3
,21B,21C		1		,200B,200C		1		
,22A,22B				PC201A	PQVITLP627	Photo Coupler	Æ	3
,22C			- 1	,201B,201C				
				PC202A	PQVITLP521	Photo Coupler	<u></u> ∱ s	11
		İ	İ	,202B,202C		l		
		(CRYSTAL OSCILLATORS)		,300A-300H		1		
X100	PQVCK6000N3Z	Crystal Oscillator	1	' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	1	1		
X101	PQCVX3579H5R	Crystal Oscillator			1	1		
X102	PQVCX4000N8Z	Crystal Oscillator			1	(RESISTORS)		
X103	PQVCL3276N4Z	Crystal Oscillator		C101	ECEA1EU101	100		1
		2.75 250	1 ' 1	C102-106	Not Used	1.55		'
		1		C102-108		0.0047		
		B .	l	C107 C108,109	ECQM1H472JV	0.0047		1
		COMPONENT COMPINIATION		I I COUNTING	Not Used	1		
7100 101	EVDD004704	(COMPONENT COMBINATION	1		FOUR	1		
Z100,101	EXBP88473K	(COMPONENT COMBINATION Resistor Array	1	C110,111	ECKD1H103KB	0.01	s	2
,102	•	Resistor Array S	3	C110,111 C112,113	ECCD1H150JC	15P	s s	2
,102 Z107	PQRS8B3223J	Resistor Array S	3	C110,111	1		s s	
,102 Z107	•	Resistor Array S	3	C110,111 C112,113	ECCD1H150JC	15P	S S	2
,102 Z107	PQRS8B3223J	Resistor Array S	3	C110,111 C112,113 C114,115	ECCD1H150JC ECCD1H470JC	15P	S S	2
,102 Z107	PQRS8B3223J	Resistor Array S	3	C110,111 C112,113 C114,115 C116,117	ECCD1H150JC ECCD1H470JC Not Used	15P 47P	S	2 2
,102 Z107	PQRS8B3223J	Resistor Array S	3	C110,111 C112,113 C114,115 C116,117 C118	ECCD1H150JC ECCD1H470JC Not Used ECEA1HU100	15P 47P	S S	2 2

C1242 ECKDI-HIGAKB 0.1 3 1		Pcs
C1251.56 ECOVIHIOALZ 0.1	-	8
1327		1
C128-129	s	5
C130	٦	3
C331-134		J
C1951.55 ECMO1H223MD	j	1
C1398	j	1
C149		1
C140 Not Used C141,142 ECOV1+HOJLZ C143 Not Used C144,142 ECOV1+HOJLZ C143 Not Used C145-147 Not Used C145-147 Not Used C145-147 Not Used C145-147 Not Used C150 ECOV1+HOJLZ C149 Not Used C150 ECOV1+HOJLZ C151,152 C151,1		1
C1411-42		
C149		1
C144 ECKD1H222MD 0.022 S 1 C308 ECCMH1222JV 0.0022 0.001 C148,149 ECKD1H223MD 0.022 S 2 C909 ECKD1H172AJ 0.001 47 A7 C912 ECKD1H172AJ 0.001 A7 A7 C912 ECKD1H172AJ 0.001 A7 A7 C912 ECKD1H172AJ 0.001 A7 A7 C913 ECKD1H173AJ 0.001 D001		1
C145-147 Not Used C150 C2014-149 C2014	1	
C149.149 CKD1H223MD 0.022 S 2 CS10,911 CSCA1HU4R7 4.7 4	l	1
C149	s	1
C150 CCQVIH104JZ Not Used 1 C913 CSQ14-916 Not Used C151,152 Not Used C154 Not Used C154 Not Used C155 CCQVIH104JZ C15 CQVIH104JZ		2
C151.152 Not Used C154 Not Used C155 ECCVIHI04JZ		1
C153 CCD1H151JC 150P S 1 C917 C918 CCDMH1932JV A7 C918 CCDMH1932JV A7 C918 CCDMH1932JV A7 C918 CCDMH1932JV A7 C918 CCDMH1932JV A7 C919 C919 CODE CCDH161JJC A7 C919 C919 CODE CCDH161JJC C919 CCDH161JJC C919 CODE CCDH161JJC C919 CODE CCDH161JJC C919 CODE CCDH161JJC C919	s	1
C154 Not Used C155 ECQVIHI04JZ C156 ECKD1H223MD C157-159 Not Used C160 ECKD1H223MD C161 ECQVIHI04JZ C161 ECCV1H23MD C162 ECKD1H223MD C163 ECQVIHI04JZ C162 ECEA1EU10 C163 ECQVIHI04JZ C163 ECQVIHI04JZ C164 ECQVIHI04JZ C165 ECQVIHI04JZ C166 ECQVIHI04JZ C166 ECQVIHI04JZ C167 T1 T1 T1 T1 T1 T1 T1 T1 T1 T1 T1 T1 T1	l	
C155	i	1
C156 ECKD1H223MD 0.022 S 1 C920 ECCD1H681KB 680P C157-159 Not Used C921 ECCD1H681KB 680P 680P C160 ECK01H223MD 0.022 S 1 C921 ECCD1H151JC 150P C161 ECW1H104JZ 0.1 1 1 R101 ERD16TJ272 2.7k C163 ECQV1H104JZ 0.1 1 R102-105 Not Used ECEA1CS332 3300 1 R102-105 Not Used ECEA1ECS332 3300 1 R106-118 ERD16TJ281 820 Not Used ECCA1EU470 47 2 R107-109 Not Used ERD16TJ151 150 Not Used R101-118	ŀ	1
C157-159 C160 C160 C160 C160 C161 C20V1H104JZ C162 C162 CECALEU101 C163 C164-167 Not Used C164-167 Not Used C164-167 Not Used C168-167 Not Used C168-168 CECALEU301 C169 C169 C169 C169 C169 C170 C171-179 C171-179 Not Used C180 C204A,204B C202A,202B C202A,204B C204C C205A,205B C204C C205A	Į	
C157-159 Not Used C160 ECKD1H23MD O.022 S 1 C161 ECQV1H104JZ O.1		1
C160 ECKDH223MD 0.022 S 1 C161 ECQV1H104JZ 0.1 1 C162 ECEA1EU101 100 S 1 R101 ERD16TJ272 2.7k CRSISTORS) C163 ECQV1H104JZ 0.1 1 R106 ED16TJJ221 2.7k Not Used 820 C168 ECEA1CSS322 3300 1 R106 ED16TJJ221 820 C169,170 ECEA1EUJ70 47 2 R107-109 Not Used 820 C180 ECQV1H104JZ 0.1 1 R119-121 Not Used 820 C190 ECEA1HU2R2 2.2 1 R119-121 Not Used 1 C190 ECEA1HU2R2 2.2 1 R122 ERD16TJ103 10k C200A, 203B ECEA1HU2R2 2.2 3 R123 ERD16TJ103 10k C201A, 202B ECEA1HU2R2 2.2 3 R125 ERD16TJ103 10k C202A, 202B ECEA1HU2R2 2.2 3	s	1
C161 ECCA1HI04JZ 0.1 1 0.0 S 1	1	•
C162	ļ	
C163 ECQV1H104JZ Not Used 0.1 1 R101 ERD16TJ272 2.7k C164-167 C168 ECEA1CSS332 3300 1 R102-105 Not Used ERD16TJ821 820 C169,170 C171-179 C171-179 C180 ECEA1EU470 47 2 R107-109 Not Used R101-118 ERD16TJ151 150 C180 C200A,200B ECQV1H104JZ C10 0.1 1 1 R119-121 Not Used R104 Not Used C190 C200A,200B ECQE474KZ C204 0.47 1 R123 ERD16TJ103 10k C200A,201B ECEA1HU20 ECEA1HU20 ECEA1HU20 ECEA1HU20 ECEA1HU100 I0 2 3 R123 ERD16TJ105 IM IM L202C C203A,203B ECEA1HU20 ECEA1HU20 ECEA1HU20 ECEA1HU20 ECEA1HU20 ECEA1HU20 ECEA1HU20 ECEA1HU20 ECEA1HU20 ECEATHU20 ECEATHU20 ECEATHU20 ECEATHU20 ECEATHU20 ECEATHU20 ECEATHU20 ECEATHU20 ECEATHU20 ECEATHU20 ECEATHU20 ECEATHU20 ECEATHU20 ERD16TJ103 I0k R129 ERD16TJ103 I0k R106 ERD16TJ103 I0k C203A,203B ECA1HU20 ECEA1HU20 ECEATHU20 ECEATHU20 ECEATHU20 ECEATHU20 ECEATHU20 ECEATHU20 ECEATHU20 ECEATHU20 ERD16TJ103 I0k R133 I0A ERD16TJ103 I0k R132 ERD16TJ103 I0k R133 I0A ERD16TJ103 I0k R133 I0A ERD16TJ103 I0k R133 I0A ERD16TJ103 I0k R133 I0A ERD16TJ103 I0k R133 I0A ERD16TJ103 I0k R134 ERD16TJ223 I0A ERD16TJ1	l	
C164-167 C168 Not Used ECEA1CSS332 3300 1 R102-105 R106 Not Used ECEA1EU470 820 Not Used C1771-179 C180 Not Used ECQV1H104JZ 47 2 R106-109 R110-118 ERD16TJ251 150 Not Used C190 ECEA1HU2R2 2 1 R119-121 R122 Not Used 100 ERD16TJ233 100 ERD16TJ233 100 ERD16TJ233 22k C200A,201B J200C ECEA1HU220 22 3 R123 R124 R101-118 Not Used 100 ERD16TJ223 22k C202A,202B J202C ECEA1HU200 22 3 R125 R126 ERD16TJ105 ERD16TJ103 10k C203A,203B J203C ECEA1HU200 22 △ 3 R127,128 R129 ERD16TJ103 10k C204A,204B J203C ECEA1HU230 22 △ 3 R130 R130 ERD16TJ103 10k C204A,204B J205C,205A J205C ECQV1H333JZ 0.033 3 R132 R132 Not Used Not Used C205A,205B J205C,206A J205C ECCV1H563JZ 0.056 6 R135 R136 ERD16TJ103 10k C207A,207	- 1	
C168 ECEA1CSS332 3300 1 R106 ECRD16TJB21 820 C169,170 ECEA1EU470 47 2 R107-109 Not Used 150 C180 ECQV1H104JZ 0.1 1 R119-121 Not Used 150 C190 ECEA1HU2R2 2.2 1 R122 ERD16TJ103 10k C200A,200B ECCE2474KZ 0.47 △ 3 R122 ERD16TJ103 10k C201A,201B ECEA1HU220 22 3 R125 ERD16TJ105 1M C202A,202B ECEA1HU220 22 △ 3 R127,128 ERD16TJ103 10k C203A,203B ECEA1HU220 22 △ 3 R130 ERD16TJ103 10k C204A,204B ECQV1H333JZ 0.033 3 R132 Not Used R131 ERD16TJ103 10k C205A,205B ECQV1H563JZ 0.056 6 R133,134 RED16TJ103 10k A206B,206C ECCD1H121KC 12	i	1
C169,170 C171-179 C180 ECEA1EU470 Not Used 47 2 R107-109 R110-118 Not Used ECQV1H104JZ 150 C180 ECQV1H104JZ ECQA0A,200B 200C 0.1 ECEA1HU2R2 22 1 R119-121 R107-109 R110-118 Not Used ERD16TJ103 10k C200A,200B 200C ECAHU2R2 22 2.2 R124 1 R124 R016TJ223 R125 22k C201A,201B 201C ECEA1HU220 ECEA1HU20 22 3 R127,128 R126 ERD16TJ105 ERD16TJ105 1M C202A,202B 202C ECEA1HU200 22 Δ 3 R127,128 R129 ERD16TJ103 10k C203A,203B 203C ECEA1HU220 22 Δ 3 R130 R130 ERD16TJ103 10k C204A,204B 203C ECQV1H333JZ 0.033 3 R132 R131 RD16TJ103 10k C205A,205B 205C,205A 206B 206C ECQV1H563JZ 0.056 6 R133 R134 RD16TJ103 10k C207A,207B 206B 206C ECCD1H121KC 120P 3 R136 R141 ERD16TJ104 100k C207A,207B 208C,209A 209B 209C ECCM1H183JV 0.018		
C171-179 Not Used ECQV1H104JZ 0.1 1 R110-118 ERD16TJ151 150 C190 ECEAHHU2R2 2.2 1 R122 ERD16TJ103 10k C200A,200B ECOZE474KZ 0.47 △ 3 R123 ERD16TJ103 10k C201A,201B ECCA1HU220 22 3 R125 ERD16TJ105 1M C202A,202B ECEA1HU100 10 △ 3 R125 ERD16TJ105 1M C202A,202B ECEA1HU220 22 △ 3 R126 ERD16TJ105 1M C202A,202B ECEA1HU220 22 △ 3 R129 ERD16TJ103 10k C202A,203B ECEA1HU220 22 △ 3 R130 ERD16TJ103 10k C204A,204B ECQV1H333JZ 0.033 3 R132 Not Used R131 47k R161FJJ233 47k R161FJJ233 47k R161FJJ233 47k R162FD16TJ334 47k R162FD16TJ334 47k		1
C180 ECQV1H104JZ 0.1 1 R119-121 Not Used SUBJECT SUBJECT Not Used C200A,200B C200A,200B ECGE2E474KZ 0.47 ⚠ 3 R122 ERD16TJ103 10k ERD16TJ223 22k 22k 22k 22k Not Used C202A,202B 22k Not Used R1224 Not Used R124 Not Used C202A,202B C201A,201B C202A,202B CECA1HU220 22 3 R125 ERD16TJ105 1M M M R126 ERD16TJ105 1M M M R127,128 ERD16TJ103 10k M M R127,128 ERD16TJ103 10k M M R129 ERD16TJ103 10k M M R129 ERD16TJ103 10k M M R130 ERD16TJ103 10k M M R131 ERD16TJ103 10k M M R131 ERD16TJ103 10k M R133 R131 ERD16TJ33 A R135 Not Used R133,134		
C190 ECEAHU2R2 2.2 1 R122 ERD16TJ103 10k C200A,200B ECO2E474KZ 0.47 △ 3 R123 ERD16TJ223 22k C201A,201B ECEA1HU220 22 3 R125 ERD16TJ105 1 M C202A,202B ECEA1HU100 10 △ 3 R125 ERD16TJ103 10k C202A,202B ECEA1HU220 22 △ 3 R127,128 ERD16TJ103 10k C203A,203B ECEA1HU220 22 △ 3 R130 ERD16TJ681 680 C203A,203B ECEQ1H3333JZ 0.033 3 R132 Not Used R131 ERD16TJ103 10k C205A,205B ECQV1H333JZ 0.056 6 R133 ERD16TJ103 47k C205A,205B ECQV1H563JZ 0.056 6 R136 ERD16TJ103 10k R205C,206A 206B,206C R136 ERD16TJ103 10k R138,139 Not Used R136 RD16TJ223		9
C200A,200B		
.200C C201A,201B ECEA1HU220 22 3 R125 ERD16TJ105 1 M .201C C202A,202B ECEA1HU100 10 ⚠ 3 R125 ERD16TJ103 10k .202C ECEA1HU20 10 ⚠ 3 R129 ERD16TJ103 10k .203C ECEA1HU220 22 ⚠ 3 R130 ERD16TJ103 10k .203C ECEA1HU220 22 ⚠ 3 R130 ERD16TJ103 10k .203C ECQV1H333JZ 0.033 3 R132 Not Used .204C R133,134 ERD16TJ103 10k C205A,205B ECQV1H563JZ 0.056 6 R135 Not Used R,206B,206C R136 ERD16TJ103 10k 10k C207A,207B ECCD1H121KC 120P 3 R138,139 Not Used R,207C R140 ERD16TJ333 33k R142 ERD16TJ333 33k R,208C,209A R,208B,209C R141 ERD16TJ333 33k		1
C201A,201B ,201C ECEA1HU220 22 3 R125 R126 ERD16TJ105 ERD16TJ222 1M C202A,202B ,202C ECEA1HU100 10 ⚠ 3 R127,128 R129 ERD16TJ032 10k C203A,203B ,203C ECEA1HU220 22 ⚠ 3 R130 R130 ERD16TJ681 ERD16TJ103 680 C204A,204B ,203C ECQV1H333JZ ,204C 0.033 3 R132 R132 Not Used R136 R136 RED16TJ103 R137 47k C205A,205B ,205C,206A ,206B,206C ECQV1H563JZ 0.056 6 R136 R136 ERD16TJ103 R137 10k C207A,207B ,208C,209A ,208C,209A ,208C,209A ,208C,209A ,209B,209C ECQM1H183JV 0.018 6 R141 R142 ERD16TJ104 ERD16TJ333 10k C210A,210B ,210C,211A ,211B,211C ECQV1H563JZ 0.056 6 R144 R143 ERD16TJ334 R145 330k C220A,220B ,212C ECCD1H121KC 120P 3 R144 R145 ERD16TJ333 R145 330k C220A,220B ,220C ECKDKC22KB 0.0022 A R146 R148,149 ERD16TJ333 R147 R148,149 68k <t< td=""><td></td><td>1</td></t<>		1
,201C C202A,202B ECEA1HU100 10 ⚠ 3 R126 ERD16TJ222 2.2k ,202C C203A,203B ,203C R127,128 ERD16TJ561 560 C203A,203B ECEA1HU220 22 ⚠ 3 R130 ERD16TJ561 560 C204A,204B ECQV1H333JZ 0.033 3 R131 ERD16TJ103 10k C205A,205B ECQV1H563JZ 0.056 6 R135 Not Used R136 ERD16TJ103 10k R137 ERD16TJ223 22k C207A,207B ECCD1H121KC 120P 3 R138,139 Not Used R137 ERD16TJ104 100k R138,139 Not Used R208C,209A ECQM1H183JV 0.018 6 R141 ERD16TJ333 33k R208C,209A ECQV1H563JZ 0.056 6 R141 ERD16TJ334 330k R208C,209A R142 ERD16TJ334 330k R142 ERD16TJ334 330k R210C,211A R145 ERD16TJ334 330k R146 ERD16TJ334 330k <td></td> <td></td>		
C202A,202B ,202C ECEA1HU100 10 ⚠ 3 R127,128 R129 ERD16TJ103 ERD16TJ561 10k ERD16TJ561 560 ERD16TJ561 560 ERD16TJ561 560 ERD16TJ561 560 ERD16TJ561 560 ERD16TJ561 560 ERD16TJ561 560 ERD16TJ561 560 ERD16TJ103 10k ERD16TJ103 10k ERD16TJ103 10k ERD16TJ473 47k ERD16TJ473 47k ERD16TJ473 47k ERD16TJ473 47k ERD16TJ473 47k ERD16TJ473 47k ERD16TJ223 22k ERD16TJ103 10k ERD16TJ223 22k ERD16TJ223 22k ERD16TJ233 22k ERD16TJ233 22k ERD16TJ233 22k ERD16TJ473 47k ERD16TJ333 10k ERD16TJ473 47k ERD16TJ233 10k ERD16TJ473 47k ERD16TJ333 10k ERD16TJ473 47k ERD16TJ333 10k ERD16TJ474 100k ERD16TJ474 100k ERD16TJ333 10k ERD16TJ333 10k ERD16TJ333 10k ERD16TJ333 10k ERD16TJ333 10k ERD16TJ333 10k ERD16TJ333 10k ERD16TJ333 10k ERD16TJ333 10k ERD16TJ333 10k ERD16TJ472 10k ERD16TJ472 10k ERD16TJ472 10k ERD16TJ333 10k ERD16TJ333 10k ERD16TJ333 10k ERD16TJ333 10k ERD16TJ333 10k ERD16TJ333 10k ERD16TJ333 10k ERD16TJ333 10k ERD16TJ333 10k ERD16TJ333 10k ER		1
,202C C203A,203B ECEA1HU220 22 ⚠ 3 R129 ERD16TJ561 560 C204A,204B ,203C C204A,204B R131 ERD16TJ103 10k C204A,204B ECQV1H333JZ 0.033 3 R132 Not Used R133,134 ERD16TJ473 47k C205A,205B ECQV1H563JZ 0.056 6 R135 Not Used ,205C,206A ,206B,206C R136 ERD16TJ103 10k C207A,207B ,207C R138,139 Not Used 22k R207C R140 ERD16TJ104 100k R208C,209A R140 ERD16TJ333 33k R208C,209A R141 ERD16TJ334 330k R209B,209C R141 ERD16TJ334 330k C210A,210B ECQV1H563JZ 0.056 6 R144 ERD16TJ333 33k R145 ERD16TJ334 330k R145 ERD16TJ334 330k R212A,212B ECCD1H121KC 120P 3 R146 ERD16TJ333 33k R146 ERD16TJ333 <td< td=""><td>1</td><td>1</td></td<>	1	1
,202C C203A,203B ECEA1HU220 22 ⚠ 3 R130 ERD16TJ561 560 ,203C C204A,204B ECQV1H333JZ 0.033 3 R131 ERD16TJ103 10k ,204C C205A,205B ,205C,206A R133,134 ERD16TJ473 47k C205A,205B ,205C,206A R135 Not Used R136 ERD16TJ103 10k ,206B,206C C207A,207B ECCD1H121KC 120P 3 R138,139 Not Used 22k ,207C R136 ERD16TJ104 100k 100k 100k 100k ,207C ECCD1H121KC 120P 3 R138,139 Not Used 100k 100k ,207C ECQM1H183JV 0.018 6 R141 ERD16TJ104 100k ,208C,209A ,209B,209C 6 R141 ERD16TJ333 33k ,210C,211A ,210C,211A R145 ERD16TJ334 330k ,212C R145 ERD16TJ333 33k	- [2
C203A,203B ,203C ECEA1HU220 22 ⚠ 3 R130 R131 ERD16TJ681 ERD16TJ103 680 10k C204A,204B ,204C ECQV1H333JZ 0.033 3 R132 R132 Not Used R133,134 ERD16TJ473 47k C205A,205B ,205C,206A ,206B,206C ECQV1H563JZ 0.056 6 R135 R136 ERD16TJ103 ERD16TJ103 10k C207A,207B ,207C ECCD1H121KC 120P 3 R138,139 R140 Not Used ERD16TJ223 22k C208A,208B ,208C,209A ,209B,209C ECQM1H183JV 0.018 6 R141 R142 ERD16TJ333 R142 330k C210A,210B ,210C,211A ,211B,211C ECQV1H563JZ 0.056 6 R144 R145 ERD16TJ333 R146 R101GTJ333 R147 330k C212A,212B ,212C ECCD1H121KC 120P 3 R147 R148,149 ERD16TJ472 R148,149 4.7k C220A,220B ,220C ECKDKC222KB 0.0022 Δ 3 R150 R150 ERD16TJ102 ERD16TJ333 1k		1
,203C C204A,204B ECQV1H333JZ 0.033 3 R131 ERD16TJ103 10k ,204C C205A,205B ECQV1H563JZ 0.056 6 R135 Not Used 47k ,205C,206A ,205C,206A R136 ERD16TJ473 47k ,206B,206C R136 ERD16TJ103 10k ,207C R137 ERD16TJ223 22k ,207C R140 ERD16TJ104 100k C208A,208B ,208C,209A R140 ERD16TJ333 33k ,209B,209C ECQV1H563JZ 0.056 6 R141 ERD16TJ334 330k ,210C,211A R143 ERD16TJ333 33k 33k ,211B,211C R144 ERD16TJ333 33k R145 ERD16TJ333 33k R146 ERD16TJ472 4.7k C212A,212B ECCD1H121KC 120P 3 R147 ERD16TJ472 4.7k C220A,220B ECKDKC222KB 0.0022 Δ 3 R150 ERD16TJ102 1k R151 ERD16TJ333 33k <td>- 1</td> <td>1</td>	- 1	1
C204A,204B ,204C ECQV1H333JZ 0.033 3 R132 R133,134 Not Used R133,134 47k C205A,205B ,205C,206A ,206B,206C ECQV1H563JZ 0.056 6 R135 R136 ERD16TJ473 ERD16TJ103 10k C207A,207B ,207C ECCD1H121KC 120P 3 R138,139 R140 Not Used ERD16TJ104 100k C208A,208B ,208C,209A ,209B,209C ECQM1H183JV 0.018 6 R141 ERD16TJ333 33k R142 ERD16TJ334 R142 ERD16TJ334 R143 R143 ERD16TJ104 ERD16TJ333 100k C210A,210B ,210C,211A ,211B,211C 6 R144 ERD16TJ333 ERD16TJ333 R145 R145 ERD16TJ472 4.7k C212A,212B ,212C ECCD1H121KC 120P 3 R147 R148,149 ERD16TJ472 R148,149 4.7k C220A,220B ,220C ECKDKC222KB 0.0022 Δ 3 R150 R150 ERD16TJ102 ERD16TJ333 1k	- 1	1
,204C C205A,205B ECQV1H563JZ 0.056 6 R133,134 ERD16TJ473 47k ,205C,206A ,206B,206C R136 ERD16TJ103 10k ,207C ECCD1H121KC 120P 3 R138,139 Not Used ,207C R138,139 Not Used R130 Not Used ,207C R140 ERD16TJ104 100k C208A,208B ,208C,209A R141 ERD16TJ333 33k ,209B,209C R142 ERD16TJ334 330k ,210C,211A R143 ERD16TJ333 33k ,211B,211C R144 ERD16TJ333 33k ,211B,211C R145 ERD16TJ472 4.7k C212A,212B ECCD1H121KC 120P 3 R146 ERD16TJ472 4.7k C212A,212B ECKDKC222KB 0.0022 A 3 R150 ERD16TJ102 1k R20C R151 ERD16TJ333 33k		'
C205A,205B ,205C,206A ,206B,206C C207A,207B ,207C C208A,208B ,208C,209A ,208B,209C C210A,210B ,209C,201A ,201B,211C C212A,212B ,212C C220A,220B ,208C C220A,220B ,208C C220A,220B ,208C C220A,220B ,208C ,20		2
,205C,206A ,206B,206C		
,206B,206C C207A,207B ECCD1H121KC 120P 3 R137 ERD16TJ223 22k ,207C C208A,208B ECQM1H183JV 0.018 6 R140 ERD16TJ104 100k ,208C,209A ,209B,209C R142 ERD16TJ333 33k ,209B,209C C210A,210B ECQV1H563JZ 0.056 6 R144 ERD16TJ333 33k ,210C,211A ,210C,211A R145 ERD16TJ333 33k R145 ERD16TJ333 33k ,211B,211C R146 ERD16TJ334 330k R146 ERD16TJ334 330k C212A,212B ,212C R146 ERD16TJ472 4.7k R148,149 Not Used C220A,220B ECKDKC222KB 0.0022 A 3 R150 ERD16TJ102 1k R151 ERD16TJ333 33k		
C207A,207B ,207C ECCD1H121KC 120P 3 R138,139 R140 Not Used ERD16TJ104 100k C208A,208B ,208C,209A ,209B,209C 6 R141 R142 ERD16TJ333 ERD16TJ334 330k C210A,210B ,210C,211A ,211B,211C ECQV1H563JZ 0.056 6 R144 R145 ERD16TJ333 ERD16TJ333 33k C212A,212B ,212C ECCD1H121KC 120P 3 R147 R146 ERD16TJ472 ERD16TJ683 4.7k C220A,220B ,220C ECKDKC222KB 0.0022 Δ 3 R150 R150 ERD16TJ102 ERD16TJ333 1k		1
,207C C208A,208B ECQM1H183JV 0.018 6 R140 ERD16TJ104 100k ,209B,209C ,209B,209C R142 ERD16TJ333 33k ,210C,211A ,210C,211A R143 ERD16TJ104 100k ,211B,211C R144 ERD16TJ333 33k ,211B,211C R145 ERD16TJ334 330k ,212C R145 ERD16TJ334 330k ,212C R146 ERD16TJ472 4.7k C220A,220B ECKDKC222KB 0.0022 A 3 R150 ERD16TJ102 1k ,220C R151 ERD16TJ333 33k		1
C208A,208B		
,208C,209A ,209B,209C R142 ERD16TJ334 330k C210A,210B ECQV1H563JZ 0.056 6 R144 ERD16TJ333 33k ,210C,211A R145 ERD16TJ334 330k 330k ,211B,211C R146 ERD16TJ334 330k C212A,212B ECCD1H121KC 120P 3 R146 ERD16TJ472 4.7k C212A,212B ,212C R148,149 Not Used 68k C220A,220B ECKDKC222KB 0.0022 ★ 3 R150 ERD16TJ102 1k ,220C R151 ERD16TJ333 33k	1	1
,209B,209C C210A,210B ECQV1H563JZ 0.056 6 R143 ERD16TJ104 100k ,210C,211A ,210C,211A R145 ERD16TJ333 33k ,211B,211C R146 ERD16TJ334 330k ,212C R146 ERD16TJ472 4.7k ,220C R148,149 Not Used ,220C R150 ERD16TJ102 1k ,220C R151 ERD16TJ333 33k		1
C210A,210B		1
,210C,211A	1	1
.211B,211C C212A,212B ECCD1H121KC 120P 3 R146 ERD16TJ472 4.7k .212C R148,149 Not Used .220C R150 ERD16TJ102 1k .220C R151 ERD16TJ333 33k		1
C212A,212B	- 1	1
C212A,212B	I	1
,212C C220A,220B ECKDKC222KB 0.0022		1
C220A,220B		•
,220C R151 ERD16TJ333 33k		1
South and South Market		
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11100,104 E11010102		2
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	- 1	4
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	1
C250 ECEA1EU102 1000 1 R160 ERD16TJ103 10k	1	1
C300A-300G ECEA1HU2R2 2.2 7 R161 ERD16TJ472 4.7k	İ	1
C300H ECEA1HKS2R2 2.2 1 R162 ERD16TJ103 10k		1
C301A-301H ECEA1HU3R3 3.3 S 16 R163 ERD16TJ472 4.7k		1
,302A-302H R164 ERD16TJ103 10k		1
C303A-303H ECEA1HU010 1 8 R165-168 Not Used		
C304A-304H ECKD1H103KB 0.01 S 16 R169,170 ERD16TJ223 22k	ļ	2
,305A-305H R171,172 Not Used	1	-

Ref. No.	Part No.	Part Name & Description	Pcs	Ref. No.	Part No.	Part Name & Description	Pcs
R173 E	ERD16TJ151	150	1	R233A,233B	ERD16TJ473	47k	6
1 1	ERD16TJ225	2.2M	1	,233C,234A	-		
1	ERD16TJ154 ERD16TJ223	150k 22k	!	,234B,234C	EDD16T 1022	82k	3
1 1	Not Used	22K	1 1	,235C	ERD16TJ823	l ozk	١
I I	ERD16TJ103	10k	1		ERD16TJ220	22	8
R186-189	Not Used				ERD16TJ682	6.8k	8
R190,191	ERD16TJ103	10k	2	R302A-302H	ERD16TJ220	22	8
1	ERD16TJ102	1k	1 1	1	ERD16TJ682	6.8k	8
1 1	Not Used		1 . 1	1	ERD16TJ470	47	8
1 1	ERD16TJ472	4.7k	2	1	ERD16TJ154	150k	8 8
,200C	PQRD12TJ223	22k	3	1	ERD16TJ103 ERD16TJ121	10k 120	8
R201A,201B	ERD16TJ122	1.2k <u></u> ↑	3		ERD16TJ121	120	8
,201C		23			ERD16TJ101	100	8
R202A,202B	ERD16TJ104	100k <u>∱</u>	3	R310A-310H	ERD16TJ222	2.2k	8
,202C			1 1	R311A-311H	ERD16TJ472	4.7k	8
R203A,203B	ERD16TJ472	4.7k <u></u> ↑	3		ERD16TJ3R3	3.3	8
,203C	EDD (AT IEDA			4	ERD16TJ102	1k	8
R204A,204B 1	EHD161J5H6	5.6	3	4	PQRD2TJ102 ERD16TJ221	1k 220	8 8
R205A-205C	Not Used			R390	ERD161J221	8.2K	1
R206A,206B		10k <u>∱</u>	3	R391,392	ERD16TJ103	10k	2
,206C				R399	ERD16TJ562	5.6k	1
R207A,207B I	ERD16TJ472	4.7k ⚠	3	R500,501	ERO16CKF1151	1.15k	3
,207C				,502]	
R208A,208B	ERD25TJ390	39 🗘 5	3	R503-510	ERO16CKF49R9	49.9	8
,208C	EDD40T H 00	At.		R511,512	ERO16CKF6491	6.49k	3
R209A,209B I	ERD1613102	1k	3	,513 R514-521	ERO16CKF1101	1,1k	8
R210A,210B	FRD16TJ103	10k	3	R522,523	ERO16CKF1101	1.15k	2
,210C	21151010100	TON		R900,901	ERD16TJ104	100k	3
R211A,211B	ERD16TJ392	3.9k	3	,902			
,211C			1 1	R903	ERD16TJ224	220k	1
R212A,212B	ERD16TJ122	1.2k	3	R904	ERD16TJ124	120k	1
,212C	555.45.45			R905-911	Not Used		
R213A,213B ,213C	ERD161J152	1.5k	3	R912,913 .914	ERD16TJ103	10k	3
R214A,214B	FRD16T.M71	470	3	R915-918	Not Used		
,214C		""		R919	ERD16TJ123	12K	1
R215A,215B	ERD16TJ122	1.2k	3	R920	ERD16TJ103	10k	1
,215C				R921	ERD16TJ563	56k	1
	ERO16CKF1003	100k	6	R922	ERD16TJ102	1k	1
,216C,217A		1	1 1	R923	ERD16TJ223	22k	1 1
,217B,217C R218A,218B	ERO16CKF3003	300k	9	R924 R925	ERD16TJ273 ERD16TJ681	27k 680	l ¦
,218C,219A	ENOTOCKI 3003	SOOK	"	R926	ERD16TJ103	10k	1
,219B,219C				R927	ERD16TJ183	18k	1
,220A,220B		i		R928	ERD16TJ103	10k	1
,220C				R929	ERD16TJ274	270k	1
	ERD16TJ122	1.2k	9	R930	ERD16TJ222	2.2k	1
,221C,222A		ĺ		R931	ERD16TJ334	330k	1
,222B,222C ,223A,223B		ĺ		R932,933 R934,935	ERD16TJ472 ERD16TJ332	4.7k 3.3k	2
,223A,223B				R950	ERD16TJ273	27k	1
R224A,224B	ERD16TJ471	470	6	R951	ERD16TJ393	39k	1
,224C,225A				R999	ERD16TJ273	27k	1
,225B,225C			1 1				l
R226A,226B	ERD16TJ122	1.2k	3				
,226C	580.00V5.000	l	1 . 1		00111007	(OTHERS)	١.
1 1	ERO16CKF1003	100k	6	E101 E102	PQJJ1D3Z PQJJ1G1Z	Jack, External Music Jack, Paging	1 1
,227C,228A ,228B,228C				E102 E103	PQJJ1TA3Y	Jack, Paging Jack,CO (MJ1A, MJ1B, MJ1C)	3
	ERO16CKF3003	300k	3	E103	PQJJ1TB16Z	Jack, Station Modular (MJ2A-2H)	8
,229C	2.10 100N 0000			E105	PQJP14D49Z	Connector Plug, 14P (CN7)	1
R230A-230C	Not Used			E106	PQJP2F4Z	Connector Plug, 2P	1
1 1	ERD16TJ473	47k	6	E107	PQJP4D14Z	Connector Plug, 4P (CN6)	1
,231C,232A		1	1 1	E108	PQJP7G3Z	Connector Plug, 7P (CN5)	1
,232B,232C				E109	PQJP8D3Z	Connector Plug, 8P (CN4)	1
		1	1 1	E110	PQJP3D9Z	Connector Plug, 3P (CN8)	1

Ref. No.	Part No.	Part Name & Description	۱ آ	Pcs	Pcs	Ref. No.	Part Name & Description	Pcs
	POWER REG	ULATOR BOARD PARTS		-			(RESISTORS)	
	7				R1	ERD16TJ332	3.3k	1
PCB2	PQWP230810M1	Power Regulator P.C. Board	- 1	1	R2	ERD16TJ102	1k	1
		Ass'y (NLA)		ł	R3	ERD16TJ472	4.7k	1
ŀ	1	İ	- 1	ŧ	R4	ERD16TJ332	3.3k	1 1
}	1	1	- 1		R5	ERD16TJ122	1.2k	1
İ	1	(ICs)	ı		R6	ERD16TJ102	1k	1
IC1	AN78L18	ic	s	1	R7	ERD16TJ472	4.7k	
IC2	Not Used	110	۰ ۱	'		1		1
1		1	- 1	1	R8	ERD16TJ223	22k	1
IC3	AN78M12F	ic	S	1	R9,10	ERD16TJ683	68k	2
IC4,5	Not Used	1	1	1	R11,12	PQRD2VJ2R7	2.7	2
IC6	PQVIPD4066UC	IC	s	1	R13	ERD16TJ102	1k	1
IC7,8	AN78M15F	lic	s	2	R14	Not Used		
1		1	Ĭ	-	R15	ERD16TJ471	470	1
1	1	1		1	1	1	1	Li
		1	1		R16	ERD16TJ472	4.7k	1
		(TRANSISTORS)	- 1		R17	ERD16TJ223	22k	1
Q1	2SD1275	Transistor (Si)	ı	1	R18	ERD16TJ473	47k	1
Q2	2SD637	Transistor (Si)		. 1	R19	ERD16TJ332	3.3k	1
Q3	2SD1406	Transistor (Si)	- 1	1	R20	ERD16TJ822	8.2k	1 1
Q4,5	2SC2021	Transistor (Si)	ļ	2	R21	ERD16TJ274	270k	1
Q6	DTC143XA		- 1		1	1	1	l '
		Transistor (Si)	-	1	R22,23,24	Not Used	I	l
Q7,8	2SD140 6	Transistor (Si)		2	R25,26	ERD16TJ272	2.7k	2
Q9,10	DTC144A	Transistor (Si)	S	2	R27,28	ERD16TJ223	22k	2
1					R29,30	PQRD1VJ3R3	33	2
1		1	1		R31	PQRD12TJ101	100	1
ł		(DIODES)	1	1	11101	CANDIZIOIOI	100	1 '
l.,	DOM DODA DA	1 '			1			l
D1	PQVD2B4B41	Diode (Si)	- 1	1	1			ł
D2	PQVDMI151	Diode (Si)	1	1	1	1	(OTHERS)	
D3,4	1SR35-200	Diode (si)	s I	2	E1	XBA1C15NU100	Fuse (F2,F3)	2
D5	Not Used		- 1		E2	PQJP5D30Z	Connector Plug, 5P (CN1)	1
D6	MA1068	Diode (si)	s	1	E3	PQJP5D48Z	Connector Plug, 5P (CN2)	1 1
D7	MA4200	Diode (Si)	_	1	E4	PQJP5D7Z	Connector Plug, 5P (CN3)	1
D8	Not Used	Didde (Si)	- 1	'	1 -	1		
1	1	L	_		E5	PQJS7L30Z	Connector Socket, 7P (w/Lead)	1
D9,10,11	1SR35-200	Diode (si)	s	3		1	(J5)	
D12	MA4091	Diode (Si)	1	1	E6	PQJS8L30Z	Connector Socket, 8P (w/Lead)	1
D13	MA4062	Diode (Si)	- 1	1	1		(J4)	1
D14,15	1SR35-200	Diode (si)	s	2	E7	PQJS3L32Z	Connector Socket, 3P (J8)	1
D16	Not Used	2.222 (4)		- 1	1-1	, doodedee	Connection (con	'
D17	1SR35-200	Diada (a)	_		ł			
1		Diode (si)	S	1		<u> </u>	<u></u>	<u> </u>
D18	MA4051	Diode (Si)		1	1	LE	D BOARD PARTS	
D19	1SS131	Diode (Si)	- 1	1	L			
				1	PCB3	PQWP3T30810M	LED P.C. Board Ass'y (NLA)	1
l	į		ı	I	ŀ			1
1	ł	(RELAY)		1	ı			i
RLY1	PQSL50Z	Relay		1	•		(DIODES)	1
Ì					D800	LN220RPH	LED	1 1
į					1	1	1	
I	1	LOLDI O'TODO	l		D801	LN420YPH	LED	1 !
1		(CAPACITORS)			D802	LN320GPH	LED	1 1
C3	EECW0H104ZN	100000		1	1			1
C4	Not Used	1			1		1	1
C5	ECET35S222SW	2200		1	1		(OTHERS)	1
C6	ECET50S682SW	6800		1	E800	PQJS4R31Z	Connector Socket, 4P (w/Lead)	1
C7		· ·			12000	r GNO4HO1Z	1	1 '
1	ECET35S222SW	2200		1	1	1	(J6)	l .
C8	ECEA1HU101	100		1	E801	POHR402Z	Spacer, LED	1
C9	ECEA1VU471	470		1	1		1	I
C10	Not Used				1	1	1	1
C11	ECEA1EU101	100		1	İ	1	1	1
C12	Not Used	1 -		'	1	1	I	1
C13	1	220		_	I	1		1
	ECEA1EU331	330		1	1		1	1
C14	ECEA1HU100	10	S	1	1	1	1	1
C15,16	ECKD1H103KB	0.01		2	1	1		1
C17	ECEA1AU222	2200	S	1	1	i	I	1
C18	ECEA1HU100	10	s	1	1		1	1
C19		1	٠ ا		1	I	I	1
1	ECEA2AN100	10		1	I	i	I	1
C20	Not Used]		1	1
C21	ECEA1HU101	100		1	1		1	1
1					1		1	l
1		1			1			1
1			1		1		1	1
1	1	1			1		1	I
		I				<u> </u>	<u> </u>	

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Pcs	Ref. No.	Part Name & Descripti	on	Pcs
	POWER	SUPPLY PARTS		
PCB4	PQWP4T30810M	Power P.C. Board Assy (Ni (with/ C601, C602, C604, C6 ZNR600, L600, E603, E60 and E606)	605,	1
C601,602 C604,605	ECKDKC222KB ECQU1A473MH	(CAPACITORS) 0.0022 0.047	Δîs Δî	2
ZNR600	ERZC14DK431U	(VARISTOR) Varistor	҈҅	1
SW1	EST15704V	(SWITCH) Switch, Power	Δì	1
T1 T2	PQLT5M9M4A PQLT1K9M1A	(TRANSFORMERS) Power Transformer Bell Transformer	⚠	1 1
L600	PQLE61	(COIL) Coil	Δ	1
E600 E601 E602 E603 E604 E605 E606 E607	PQWAT616M PQUV36Y PQUV37Y PQJP7C1Z PQJS5L30Z PQMD4012Z XBA2F15NU2 PQQT4181Z	(OTHERS) Power Cord Assembly Power Box Cover Power Box Connector Plug, 7P Connector Socket, 7P (w/L (J3) Bracket, Power Box Fuse Label	<u>^</u>	1 1 1 1 1 1 1

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ORDER NO. KMS9802249S3

Service Manual

Supplement-2

EASA-PHONE

ELECTRONIC MODULAR

SWITCHING SYSTEM

KX-T30810B-3

(for Asia, Middle Near East and Other areas)

Please file and use this supplement manual together with the service manual for Model No. KX-T30810B-3 (for Asia, Middle Near East and Other areas), Order No. KM49208241A3.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians.

Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

CHANGES

Subject:

Suffix	Reason for suffix change
A → B	Change of the software (IC101 ROM version: Y121P → Y121S). Parts list is no change.
B → C	Addition of surge absorber on the main board and for automatic insert machine.
$C \rightarrow D$	Change of ROM (IC101: EPROM → MASKROM). There is no change in the parts list.
D→E	Addition of Jumper wire for pattern mistake on the main board. (Parts list is no change).
E→F	Not used.
F→G	Change of power cord.
G → H	Improve performance of reversed electrical current.
H→I	Change of the software (IC101 ROM version: Y121S → Y211M). Parts list is no change.
l → J	Not used.
J → K	Change of the main board.
K→L	Change of the crosspoint switches.
L→M	Change of ROM (IC101: MASKROM → EPROM, version: Y211M → Y211V).
M →N	Change of the cushion material for standing the drop shock.
	(There is no change in the replacement parts list).

Suffix location:

(Example)

Suffix A - N 7HAQB123456 Serial No. Label

Panasonic

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■ REPLACEMENT PARTS LIST Change from original pages 20-24.

Reason for Change Following 1-8 rea	isons are indicated on the Notes in the bottom column.
1. Improve performance	Note:
2. Change of material or dimension	*1 The part with mark *1 have been changed at the same time.
To meet approved specification	*2 The part with mark *2 have been changed at the same time.
4. Standardization	*3 The part with mark *3 is change of Ref. No.
5. Addition	
6. Deletion	
7. Correction	
8. Other	
Interchangeability Code Following V-Z into	erchangeabilities are indicated on the Notes in the bottom column.
Parts Set Production	Description
V Original Early (before change) New Early (defore change)	Original or new parts may be used in early or late production sets. Use original parts until exhausted, then stock new parts.
W Original Early (before change) New Late (after change)	Original parts may be used in early production sets only. New parts may be used in early or late production sets. Use original parts where possible, then stock new parts.
X Original Early (before change) New Late (after change)	New parts only may be used in early or late production sets. Stock new parts.
Y Original → Early (before change) New → Late (after change)	Original parts may be used in early production sets only. New parts may be used in late production sets only. Stock both original and new parts.
Z Other	

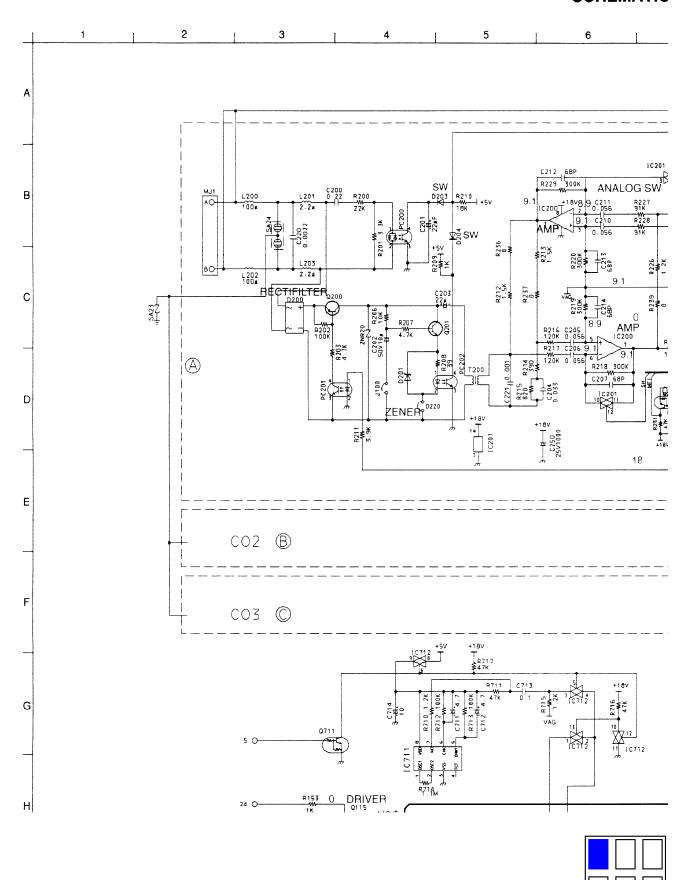
Ref. No.	Par	t No.	Part Name & Description	Pcs	Remarks	Not	es	Time of change (Suffix)
	Original Part	New Part						
CABINET & E	LECTRICAL PARTS			,				
7	P-01H-F2G1		BATTERY	0		6		1
8	PQUV50Z	PQUV50T	BATTERY COVER	L		1	Х	l
ACCESSORIE	S AND PACKING M	ATERIALS				_		
A9		PSQW1143Z	LEAFLET FOR ADDED FUNCTIONS	1		5		М
P3	PQPN9036Y	PQPN9036X	CUSHION COMPLETE (L, R SIDE)	1		7		<u> </u>
MAIN BOARD	PARTS				r			
IC116	PQVITP5089N	PQVIUM95089	IC	1	*1	8	W	
IC125-130	PQVIM402101P	MN6105	IC	6		8	Υ	J
IC201A-201C	PQVIPD4066BC	PQVITC4066BF	IC S	3		2	Υ	
Q200A-200C	2SA1626	2SA1009A	TRANSISTOR (SI)	3		1	W	С
	2SA1009A	2SA1627	TRANSISTOR (SI)	3		1	٧	
Q201A-201C	2SC2235	2SD1897	TRANSISTOR (SI)	3		1	w	С
D115	1SV124	JUMPER WIRE	JUMPER WIRE	1_		8	Υ	
D116	1SS131		DIODE	0		6		
D205A-205C	MA4047		DIODE (SI)	0	*2	6	Ш	
D206A-206C	MA4047		DIODE (SI)	0	*2	6		
D307A-307H		1SS131	DIODE (SI)	8		5	L	С
D400-402		1SS131	DIODE (SI) S	3		5		<u> </u>
BAT1		CR23541GUF	LITHIUM BATTERY	1		5		
ZNR30A-30H	ERZC03DK241	ERZTC5AK390	VARISTOR	8		1	X	С
ZNR31A-31H	ERZC03DK241	ERZTC5AK390	VARISTOR	8		1	х	С
ZNR32A-32H	ERZC07DK820	ERZTC5AK390	VARISTOR	8		1	х	С
ZNR33A-33H		ERZTC5AK390	VARISTOR	8		5		С
X101	PQVCX3579H5R	PQVBFC3584A1	CRYSTAL OSCILLATOR S	1		1	w	С
X103	PQVCL3276N4Z	PQVCL3276N6Z	CRYSTAL OSCILLATOR	1		8	w	
Z111		PQRSLD3X472J	RESISTOR ARRAY S	1		5		С
	PQRSLD3X472J		RESISTOR ARRAY S	0		6	<u> </u>	Н

Reason for Change
Interchangeability Code

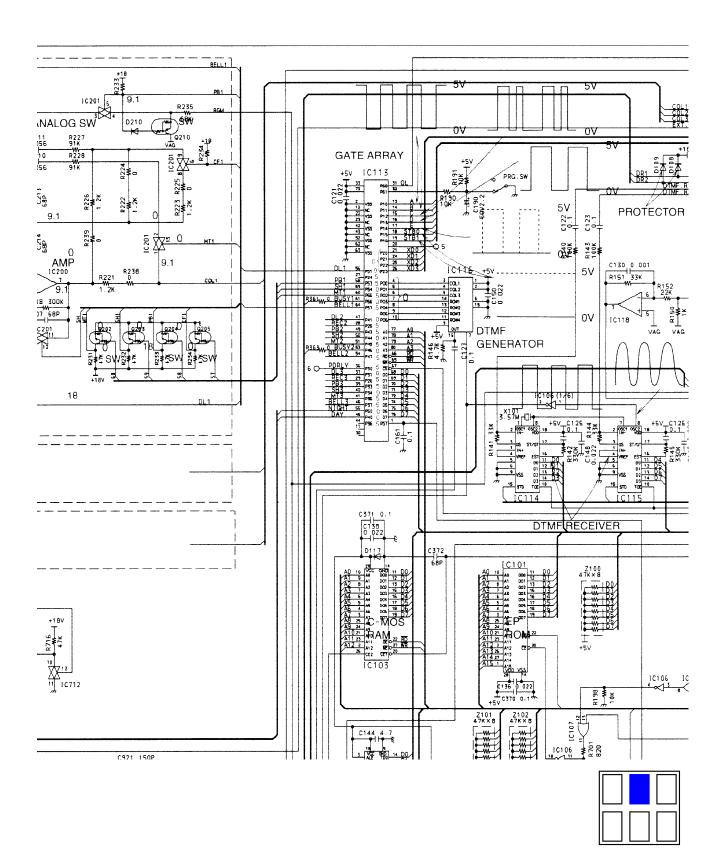
Ref. No.	Par	t No.	Part Name & Description	Pcs	Remarks	No	tes	Time of change (Suffix)
	Original Part	New Part						,
L110,L111	PQLQZM2R2K		CHOKE COIL	0		6		1
L200A-200C	PQLQZK101K	PQLE106	CHOKE COIL	3		1	Υ	1
L202A-202C	PQLQZK101K	PQLE106	CHOKE COIL	3		1	Υ	ı
L301B-301C		ERDS2TJ0T	RESISTOR, 0Ω	2		5		ı
J202		ERDS2TJ0T	RESISTOR, 0Ω	1		5		ı
VC100	PQCVTZB30B	ECRLA030E53	TRIMMER	1		1	w	С
	ECRLA030E53	ECCD1H180JC	CAPACITOR, 18PF	1		8	w	
TH1	PQRRTS104U		THERMISTOR	1		6		
TH2	PQRRTS203U		THERMISTOR	1		6		
PC200A-200C	PQVITLP520	0N3181R	PHOTO COUPLER △ S	3		1	Υ	I
C107	ECQM1H472JV	ECCD1H180JC	CAPACITOR, 18PF	1		8	w	
C182-184		ECQV1H104JZ	CAPACITOR, 0.1μF	3		5		С
	ECQV1H104JZ		CAPACITOR, 0.1μF	0		6		1
C185		ECCD1H680JC	CAPACITOR, 68PF	1		5		С
	ECCD1H680JC		CAPACITOR, 68PF	0		6		I
C186-187		ECQV1H104JZ	CAPACITOR, 0.1μF	2		5		С
	ECQV1H104JZ		CAPACITOR, 0.1μF	0		6		1
C200A-200C	ECQE2E474KZ	ECQE2224KF	CAPACITOR, 0.22µF	3	*2	8	V	
C204A-204C	ECQV1H473MD	ECUV1H333JC	CAPACITOR, 0.033μF	3		1	Υ	
C205A-205C	ECUV1H563MD	PQCUV1E563MD	CAPACITOR, 0.056μF	3		2	Υ	1
C206A-206C	ECUV1H563MD	PQCUV1E563MD	CAPACITOR, 0.056μF	3		2	Y	l
C207A-207C	ECUV1H121JC	PQCUV1H121JC	CAPACITOR, 120PF	3		2	Υ	ı
	PQCUV1H121JC	PQCUV1H680JC	CAPACITOR, 68PF	3		1	Υ	
C208A-208C	ECQM1H183JV	PQCUV1H183KB	CAPACITOR, 0.018μF	3		2	Υ	l l
	PQCUV1H183KB		CAPACITOR, 0.018μF	0		6	<u> </u>	
C209A-209C	ECUV1H183KB	PQCUV1H183KB	CAPACITOR, 0.018μF	3		2	Υ	I
	PQCUV1H183KB		CAPACITOR, 0.018μF	0		6		
C210A-210C	ECUV1H563MD	PQCUV1E563MD	CAPACITOR, 0.056μF	3		2	Υ	1
C211A-211B	ECUV1H563MD	PQCUV1E563MD	CAPACITOR, 0.056μF	2		2	Υ	
C211C	ECUV1H563MD		CAPACITOR, 0.056μF	0		6		ı
C212A-212C	ECUV1H121JC	PQCUV1H121JC	CAPACITOR, 120PF	3		2	Υ	l
	PQCUV1H121JC	PQCUV1H680JC	CAPACITOR, 68PF	3		1	Υ	
C213A-213C		PQCUV1H680JC	CAPACITOR, 68PF	3		5		
C214A-214C		PQCUV1H680JC	CAPACITOR, 68PF	3		5		
C221A-221C	ECKD1H102JA	PQCUV1H102J	CAPACITOR, 0.001μF	3		2	Υ	1
C307A-307H	***************************************	ECQB1H393KF	CAPACITOR, 0.039μF	8		1	Υ	С
R106	ERDS2TJ821		RESISTOR, 820Ω	0		6	_	1
R159	PQ4R18XJ472	PQ4R18XJ473	RESISTOR, 47kΩ	1		8	w	
R161	PQ4R18XJ472	PQ4R18XJ473	RESISTOR, 47kΩ	1		8	w	
R174	ERDS2TJ225	***************************************	RESISTOR, 2.2MΩ	0		6	匚	
R175	ERDS2TJ154		RESISTOR, 150kΩ	0		6	$ldsymbol{ld}}}}}}$	
R176	ERDS2TJ223	***************************************	RESISTOR,22kΩ	0		6	L.	
R185	ERDS2TJ103	PQ4R10XJ103	RESISTOR, 10kΩ	1		2	Υ	i
R196,R197	PQ4R18XJ222		RESISTOR, 2.2kΩ	0	*3	6		1
R916,R917		PQ4R18XJ222	RESISTOR, 2.2kΩ	1	*3	5		1
R201A-201C	ERDS2TJ122	PQ4R10XJ332	RESISTOR, 3.3kΩ	3		2	Υ	I
R202A-202C	ERDS2TJ104	PQ4R10XJ104	RESISTOR, 100kΩ	3		2	Υ	l I
R204A-204C	ERDS2TJ5R6	***************************************	RESISTOR, 5.6Ω	0		6		ļ

Ref. No.	Part No.		Part Name & Description	Pcs	Remarks	Notes		Time of change (Suffix)
nei. No.	Original Part	New Part	Fait Name & Description	FCS	nemarks	NO	162	Time of change (Sullix)
D0074 007C			DECICTOR AZIO			_	l v	
R207A-207C	ERDS2TJ472	PQ4R10XJ472	RESISTOR, 4.7kΩ	3		2	Y	
R210C	ERDS2TJ183	PQ4R10XJ183	RESISTOR, 18kΩ	1		2	Y	· I
R211A-211C	ERDS2TJ392	PQ4R10XJ392	RESISTOR, 3.9kΩ	3		2	ΙÝ	1
R212A-212C	PQ4R18XJ122	ERDS2TJ122	RESISTOR, 1.2kΩ	3		2	Y	1
	ERDS2TJ122	ERDS2TJ152	RESISTOR, 1.5kΩ	3		1	Y	
R213A-213C	PQ4R18XJ122	ERDS2TJ122	RESISTOR, 1.2kΩ	3		2	Υ	1
	ERDS2TJ122	ERDS2TJ152	RESISTOR, 1.5kΩ	3		1	Υ	
R214A-214C	PQ4R18XJ391	PQ4R10XJ391	RESISTOR, 390Ω	3		2	Υ	I
R215A-215C	PQ4R18XJ122	PQ4R10XJ102	RESISTOR, 1kΩ	3		2	Υ	
	PQ4R10XJ102	PQ4R10XJ821	RESISTOR, 820Ω	3		1	Υ	
R216A-216C	ER016CKF1003	PQ4R10XF1003	RESISTOR, 100kΩ	3		2	Υ	1
	PQ4R10XF1003	PQ4R10XJ124	RESISTOR, 120kΩ	3		1	Υ	
R217A-217C	PQ4R18XF1003	PQ4R10XF1003	RESISTOR, 100kΩ	3		2	Υ	[
	PQ4R10XF1003	PQ4R10XJ124	RESISTOR, 120kΩ	3		1	Υ	
R218A-218C	PQ4R18XF3003	ER016CKF3003	RESISTOR, 300kΩ	3		2	Υ	I
R222A-222C	ERDS2TJ122	PQ4R10XJ122	RESISTOR, 1.2kΩ	3		2	Υ	l
R223A-223C	ERDS2TJ122	PQ4R10XJ122	RESISTOR, 1.2kΩ	3		2	Υ	1
R224A-224C	ERDS2TJ471	PQ4R10XJ471	RESISTOR, 470Ω	3		2	Υ	1
	PQ4R10XJ471	PQ4R10XJ000	RESISTOR, 0Ω	3		1	Υ	
R225A-225C	ERDS2TJ471	PQ4R10XJ471	RESISTOR, 470Ω	3		2	Y	
	PQ4R10XJ471	PQ4R10XJ000	RESISTOR, 0Ω	3		1	Y	
R227A-227C	ER016CKF1003	PQ4R10XF1003	RESISTOR, 100kΩ	3		2	Υ	l l
	PQ4R10XF1003	PQ4R10XJ913	RESISTOR, 91kΩ	3		1	Y	
R228A-228C	ER016CKF1003	PQ4R10XF1003	RESISTOR, 100kΩ	3		2	Y	l
	PQ4R10XF1003	PQ4R10XJ913	RESISTOR, 91kΩ	3		1	Υ	
R234C	ERDS2TJ473	PQ4R10XJ473	RESISTOR, 47kΩ	1		2	Y	ı
R235A-235C	ERDS2TJ683	PQ4R10XJ683	RESISTOR, 68kΩ	3		2	Υ	<u> </u>
R300A-300B	PQ4R18XJ220	ERDS2TJ220	RESISTOR, 22Ω	2		7		
R301A-301H	ERDS2TJ682	PQ4R10XJ682	RESISTOR, 6.8kΩ	8		2	Υ	1
R303A-303H	ERDS2TJ682	PQ4R10XJ682	RESISTOR, 6.8kΩ	8		2	Y	l l
R304A-304H	ERDS2TJ470	PQ4R10XJ682	RESISTOR, 6.8kΩ	8		2	Y	С
R340A-340H		ERDS2TJ680	RESISTOR, 68Ω	8		5	_	С
R341A-341H		ERDS2TJ680	RESISTOR, 68Ω	8		5	_	С
R361		PQ4R10XJ000	RESISTOR, 0Ω	1		5	$oxed{oxed}$	
R363		PQ4R10XJ000	RESISTOR, 0Ω	1		5	_	l l
R374		PQ4R10XJ000	RESISTOR, 0Ω	1		5	_	
R702	ERDS2TJ102	PQ4R10XJ102	RESISTOR, 1kΩ	_ 1		2	W	С
	PQ4R10XJ102	ERDS2TJ102	RESISTOR, 1kΩ	1		2	W	1
R919	ERDS2TJ123	ERDS2TJ153	RESISTOR, 15kΩ	1	*1	8	W	
	ERDS2TJ153	ERDS2TJ123	RESISTOR, 12kΩ	1		1	Y	
R921	ERDS2TJ563	ERDS2TJ333	RESISTOR, 33kΩ	1	*1	8	W	
	ERDS2TJ333	ERDS2TJ223	RESISTOR, 22kΩ	1		1	Υ	
R999	ERDS2TJ183	PQ4R10XJ183	RESISTOR, 18kΩ	1		2	Υ	l
E106	PQJP2F4Z		CONNECTOR PLUG, 2P	1		6	L	<u> </u>
	ULATOR BOARD P	-1				_		I
R4	ERDS2TJ332	ER016CKF3301	RESISTOR, 3.3kΩ	1		1	Х	
R5	ERDS2TJ112	ER016CKF1201	RESISTOR, 1.2kΩ	1		1	Х	L
POWER SUP	T	I				r	-	
E600	PQWAT616BX	PQWAT616BX1	POWER CORD ASSEMBLY	1		1	Υ	G
E602	PQUV37Y	PQUV37V	POWER BOX	1		2	<u>X</u>	<u> </u>

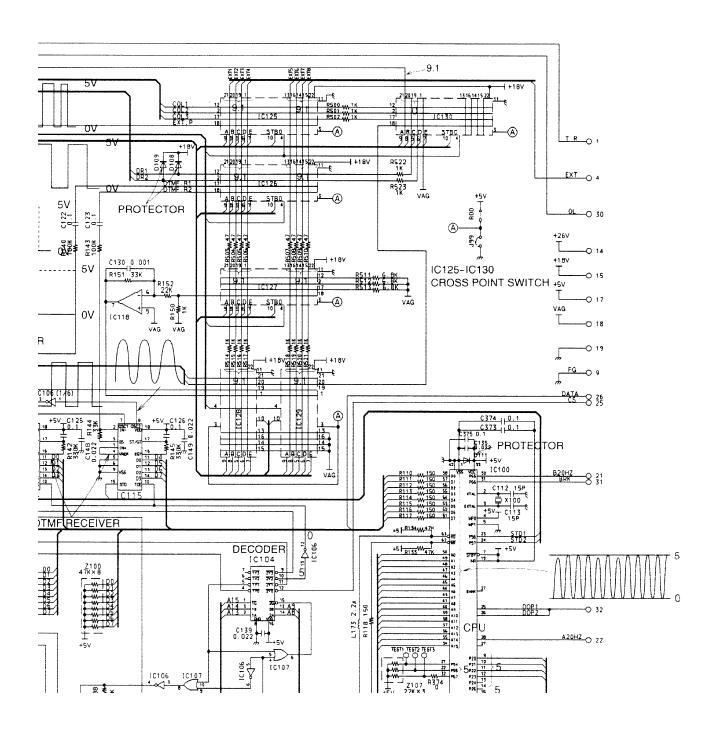
SCHEMATIC



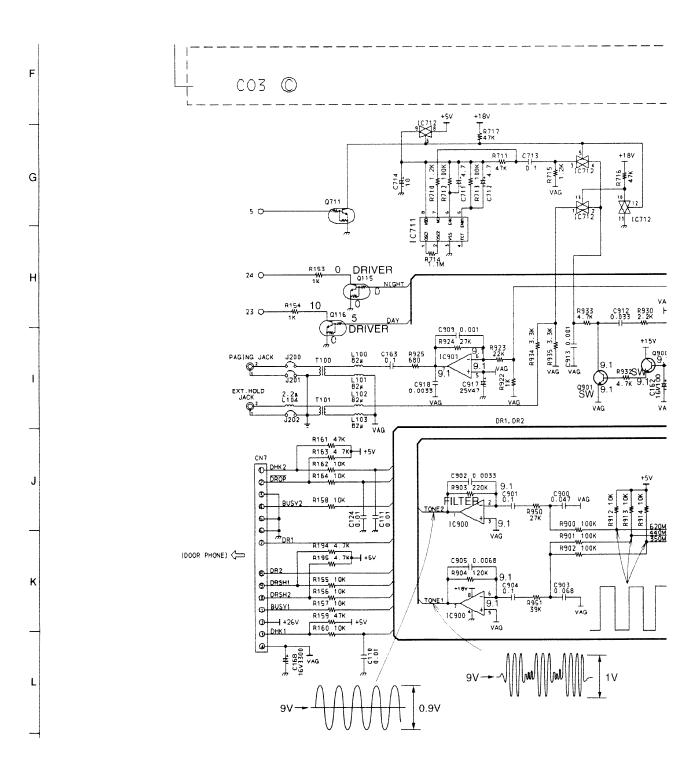
IEMATIC DIAGRAM (MAIN CIRCUIT) Change from the original pages 13-15



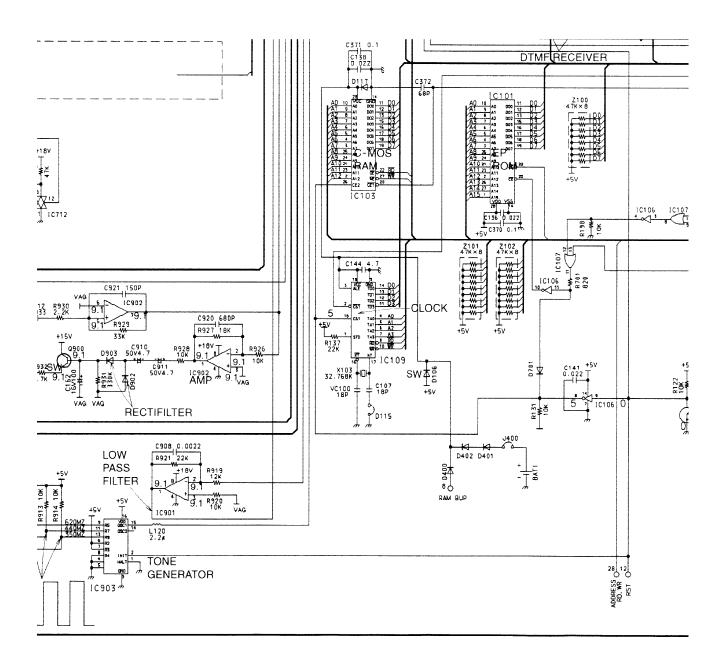
12 | 13 | 14 | 15 | 16 | 17



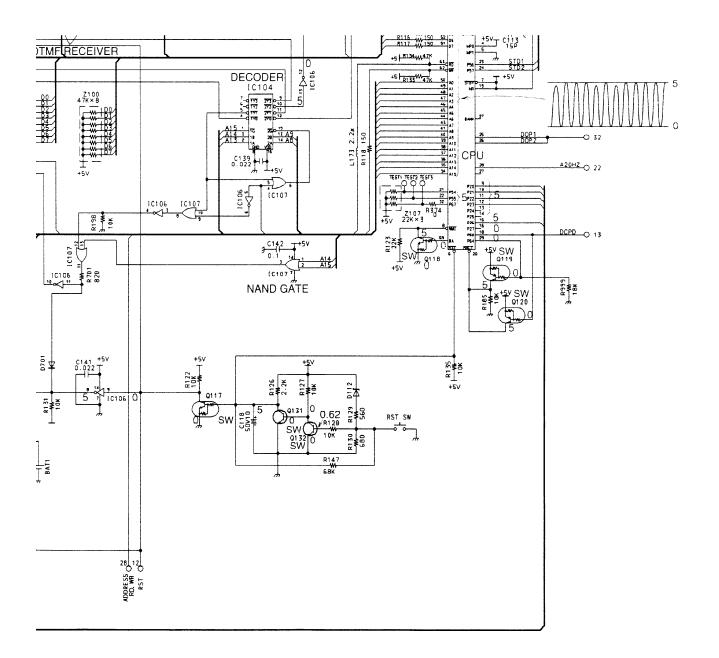






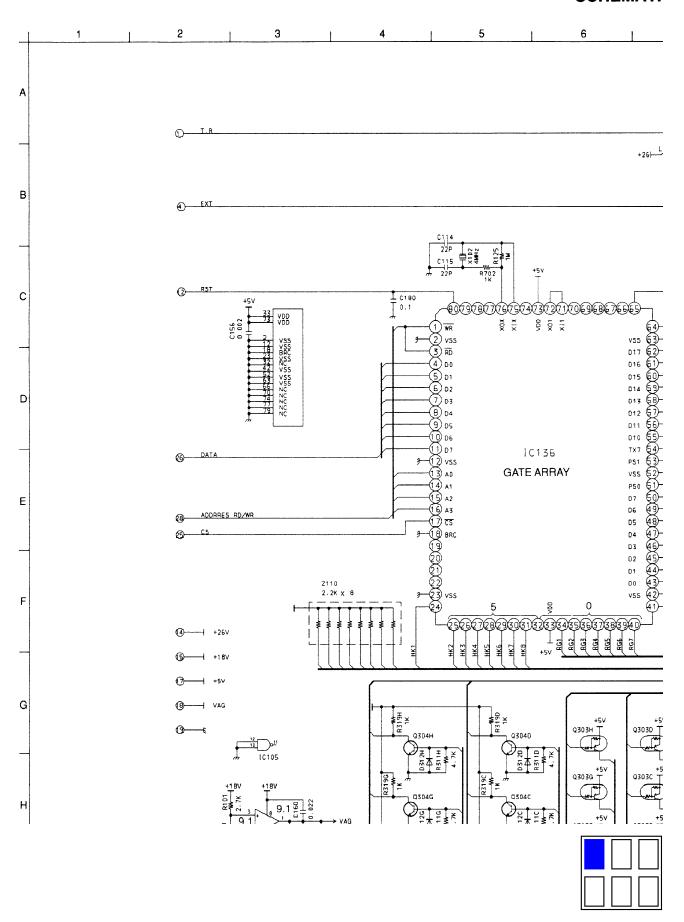




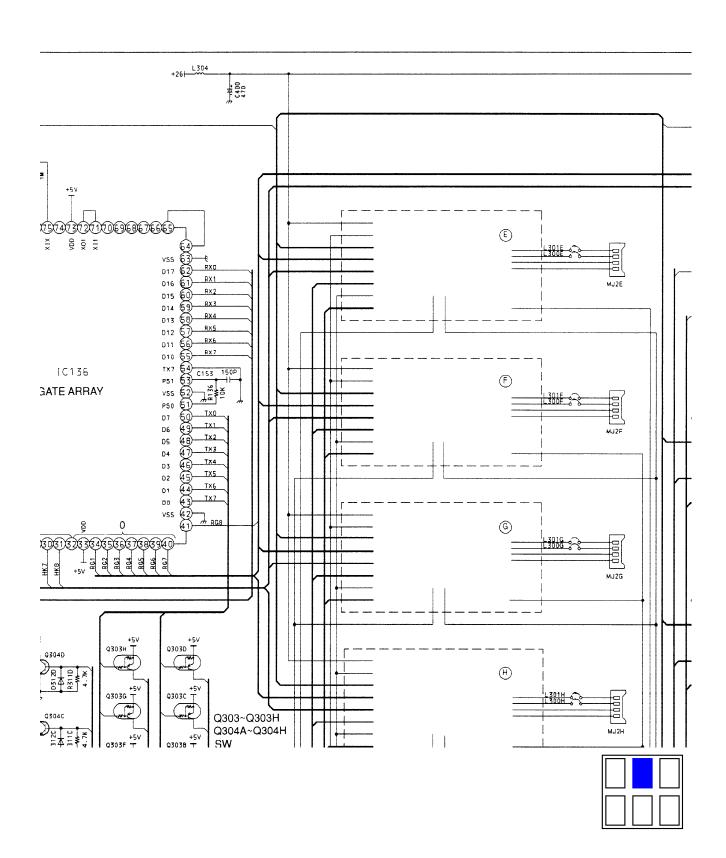




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SCHEMATIC DIAGRAM (MAIN CIRCUIT) Change from the original pages 1



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